DECISION RECORD

EA LOG NO.: **OR-010-2000-03**
PROJECT NAME: **Chewaucan 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:

Conduct the first of a multi-treatment/multi-year project for hazardous fuel reduction and ecosystem restoration, as described in Alternative 1 of E.A. #OR-010-2000-03. Mechanical fuels treatments and prescribed burns will be conducted on approximately 3,000 acres of public land in the Chewaucan watershed. An additional 3,000 acres of private land may be included in this treatment area.

The EA includes the treatment of some 10,000 acres of public land. This decision only refers to the first project area, lying south of Paisley, in Lake County, Oregon, and bounded by the Chewaucan River on the north and west, Highway 31 to the east and the Fremont National Forest to the south. Subsequent decision(s) will be necessary in order to implement projects north of Paisley and the Chewaucan River.

Following the manual and mechanical pretreatments, prescribed fire plans will be designed and implemented on the project area to further reduce the hazardous fuel load and restore ecosystem function. Existing roads and mowed lines will serve as burn boundaries as needed. Several structures are present in the area, and pre-burn treatments will be needed to reduce the risk of damage to these structures.

Fire control lines may be necessary in order to successfully implement the prescribed burn. These lines will be evaluated, stabilized, and rehabilitated following the prescribed burns.

A prescribed burn plan will be developed and approved prior to burning, and will include an evaluation of treatment, season of burn, desired fire behavior, appropriate season, weather, and fuel conditions, staffing, ignition pattern, etc.

Hand-lighting of fuels will be required within 100 yds. of the riparian zone along the Chewaucan River, in order to minimize the chance of fuel spills into live water. Riparian vegetation will also not be impacted by motor vehicles used during burning, and cottonwood trees along streambanks will be protected.

All vehicles on the burn project will be washed prior to entering the area in order to reduce the spread of noxious weeds.

If needed to protect plant health and vigor, livestock grazing may be prohibited during the first two growing seasons following burning on BLM-administered land. There will be no increase in permitted livestock grazing as a result of this project.

Other mitigation measures which are included as a part of this decision include keeping the fire away from known cultural sites and leaving buffer zones around cheat grass and mahogany sites.

Other alternatives considered were Alternative 2, which would have treated a much smaller area, and Alternative 3, which would have continued current management and not permitted a prescribed burn or mechanical fuel treatments on public lands in this project area.

Rationale:

I have reviewed the Environmental Assessment for this project, and have decided to implement Alternative 1, which includes the pretreatment of fuels and the use of prescribed fire over a time span of several years in the Chewaucan Watershed. This decision also includes the adoption of mitigation measures described in the EA for this alternative. I am selecting this alternative for the following reasons:

> Fire exclusion has resulted in dramatic changes to this project area. These changes include a profound increase in the coverage and extent of juniper, reductions in the coverage and vigor of shrubs, forbs, and grasses, increased risk of uncharacteristic wildfire effects, and risks to the private lands, residences, and the community of Paisley from wildfire. A reduction in this coverage of juniper and sagebrush should result in an increase in native forbs, grasses and aspen. The increase in native forbs, combined with the expected mosaic burn pattern, should result in more vegetative productivity and greater species biodiversity in the area, as well as reduced fire intensity in the event of a wildfire in the area.
>
> The treatment alternatives as described in the EA both attempt to restore some of fire's role to the landscape through the judicious use of mechanical fuel treatments (felling of junipers) and prescribed fire. Alternative 1 more completely treats the area, leaving it in better condition from the standpoints of fuel loading, understory vigor, and hazard reduction.

William C. Aney
Acting Field Manager
Lakeview Resource Area

19 Sept '02
Date

Finding Of No Significant Impact (FONSI)

Chewaucan Proposed Fuel Treatment Project

Environmental Assessment (EA) No. OR-010-2000-03
Lakeview District, Bureau of Land Management

Summary of the Proposed Action

The Lakeview Resource Area, Lakeview District, Bureau of Land Management proposes a series of fuels treatment projects in the Chewaucan watershed of the Abert Lake subbasin. The purpose of the proposed action is to reintroduce fire as an ecological process within the Chewaucan River watershed. The exclusion of fire in the big sagebrush/western juniper community over the last several decades has resulted in a build-up of fine dead fuels and changes in plant communities that have increased the risk of resource losses associated with future wildfires. Decades of fire suppression, coupled with historic over-grazing (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 Paisley Ranger District (PRD) of the Fremont National Forest has implemented prescribed fire projects on the National Forest lands within the Chewaucan watershed. The Lakeview Resource Area would work collaboratively with the PRD to continue these ecosystem-benefiting actions on a landscape basis on approximately 10,000 acres of BLM-administered land within a larger 20,000-acre management area that includes PRD and adjacent private lands.

This action would help maintain and improve the health and diversity of existing plant communities, control the spread of western juniper, reduce hazardous fuels, and improve wildlife habitat conditions. The proposed project is in conformance with the High Desert Management Framework Plan (1982), as amended, the Lakeview Grazing Management Final EIS and Record of Decision (1982), the Oregon and Washington Record of Decision for Vegetation Treatment on Bureau of Land Management Lands in the Thirteen Western States (1991), the Standards for Rangeland Health and Guidelines for Livestock Grazing Management (1997), and the Draft Lakeview Resource Management Plan/Environmental Impact Statement (2001).

The following resources are either not present or would not be impacted by any of the alternatives considered: no areas of critical environmental concern, research natural areas, wilderness study areas, wetlands, floodplains, riparian areas, aquatic resources, paleontological resources, wild and scenic rivers, known hazardous waste areas, areas of religious concern, or 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 fisheries, land tenure, or minerals. Surveys found no threatened or endangered plants or animals in the area. Impacts to other resource values are discussed in the 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

CHEWAUCAN PROPOSED FUEL TREATMENT PROJECT
ENVIRONMENTAL ASSESSMENT
(EA# OR-010-2000-03)

SECTION 1 - PURPOSE AND NEED FOR ACTION

1.1 Introduction

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, as amended, and the Public Rangelands Improvement Act of 1978). This Environmental Assessment (EA) analyzes the effects of introducing prescribed fire within BLM-administered lands in two main units beginning about 2 miles south of the town of Paisley, Oregon, west of Highway 31, and continuing to the Government Harvey Pass road (Map 1).

The purpose of the proposed action is to reintroduce fire as an ecological process within the Chewaucan watershed. The exclusion of fire in the big sagebrush/juniper community over the last several decades has resulted in a build-up of fine dead fuels and changes in plant communities that have substantially increased the risk of resource losses associated with wildfires. Decades of fire suppression, 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). According to a study by Miller (1997), western juniper began expansion in this basin between 1875 and 1885. Juniper establishment in the mountain big sagebrush community type increased rapidly during the next several decades, with the highest peak between 1905 and 1915. Since then Juniper has continued to increase at a steady rate across the project area. Miller (1997) analyzed the fire history spanning a period between 1520 and 1996. Mean fire interval prior to 1903 for the entire basin was approximately 11.4 years. Mean fire intervals for individual fire history plots ranged between 16 and 22.4 years, with fire intervals ranging between 10 and 37 years. Since 1903, no evidence of fire was found. Nearly half of the pre-settlement fires were large burns. Nearly all of the aspen stands visited were in varying levels of juniper encroachment. Fire probably played an important role maintaining these communities. In the absence of fire, aspen stands will continue to decline across the area. (Miller1997).

The Paisley Ranger District of the Fremont National Forest has implemented prescribed fire projects on the National Forest lands in the Chewaucan Basin and is currently planning similar projects in the vicinity under a separate NEPA analysis. The Lakeview Resource Area would work collaboratively with the Paisley Ranger District to continue these ecosystem-benefiting actions on approximately 10,000 acres of BLM-administered land within a 20,000-acre management area that includes national forest and adjacent private lands.

In conjunction with these proposed fuel treatment projects, this project would provide data on the effects of prescribed burning in western juniper stands through the collection of pre- and post-treatment vegetation data. This data set would be compare with other emerging data sets

addressing fire effects in juniper ecosystems. At the same time, the proposed action would be of sufficient scale to begin to address concerns over declining biodiversity and site productivity. Burning in the big sagebrush/western juniper communities would allow for the re-establishment of grasses and forbs, which would enhance diversity and productivity of plant communities, enhance water storage, reduce erosion, improve stream channel integrity, and improve habitat to support vertebrate and invertebrate populations.

1.2 Decision to be Made

The decision to be made is whether or not to employ prescribed fire as a management tool on BLM-administered lands within the Chewaucan watershed or to continue with current management (no prescribed burning).

1.3 Scoping

The Paisley Ranger District initiated this proposal. The project was publicly scoped regarding lands administered by the Forest Service. Few public comments were received. In addition, an interdisciplinary team internally scoped the proposal to identify issues of concern.

1.4 Management Objectives

This EA proposes to use prescribed burning to:

1) Reduce the potential for a catastrophic wildfire in the Chewaucan watershed near the Town of Paisley, including numerous private landowners in the larger landscape of the Lake Abert subbasin.
2) Achieve lower overall fire management cost by reducing the potential for large acreage, multi-burn period fires, in timber fuel type.
3) Reintroduce fire as a management tool in the Chewaucan/Summer Lake watersheds and restore and maintain long-term ecosystem health and ecological integrity.

Specific goals are to identify and conduct treatments/prescribed burns in units that meet the following objectives:

1) Reduce Fuel levels in order to decrease the chance of extreme habitat losses through stand replacing or catastrophic wildfire.
2) Maintain/increase wildlife habitat diversity and improve ecosystem integrity through the development of structurally diverse plant communities, containing multiple seral stages and increased plant/wildlife species vigor. Improve or maintain biological diversity and the ecological process (e.g. fire).
3) Abate the expansion of young juniper. Reduce big sagebrush canopy cover via mosaics, to 20-30%. Increase perennial grass, perennial forb and annual forb cover by 50-70%

SECTION 2 - ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

2.1 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 No Action) improve or maintain biological diversity and the ecological process (e.g. fire).

Alternative No. 1 - Conduct a Wildland Urban Interface (WUI) fuels treatment project on federal and private lands west of Paisley, OR (Preferred)

The first implementation area would be in the Chewaucan watershed and annual, subsequent treatments would continue to the northwest along the tablelands of the Summer Lake watershed, burning on private, BLM, and Forest Service-administered lands. This would result in treating multiple units, (to be more clearly defined and surveyed before treatment) totaling approximately 10,000 acres BLM-administered land (and an undetermined amount of private and Forest Service acreage) within a 20,000-acre project area, over about a five-year period beginning in 2002. Project implementation would consist of pre-treatment of vegetation and fuels, by mechanical and manual means followed by prescribed fire. BLM-administered lands that are identified as hazardous fuel reduction acres may have multiple entries depending on the initial fuel load, resource objectives, the success of the treatments, or combination these factors. Specific fuel reduction ratios for the timber group would be developed, as needed, in each specific unit by photo analysis and field survey. Private land would be included in the project area if individual landowners choose to participate and enter in to a cooperative agreement with the BLM and the Forest Service.

Each year an area of about 2000-4000 acres within the project area would be identified by a myriad of variables and prioritized for treatment. These units, once identified, would be subject to clearances for special status species, cultural, and historical, values and mitigation developed, if needed. The variables would consist of, and may include, existing roads, naturally occurring boundaries, resource condition, fuel types and loading, weed invasion, livestock grazing allotments, and accessibility. Additional control lines would be constructed, as needed, in a manner appropriate for fuel types and needs. All constructed control lines would be evaluated, stabilized, and rehabilitated after completion of the project(s). Each year interested parties would be notified of proposed treatments and given an opportunity to participate in the project and provide comments.

Once a unit was approved, a prescribed fire burn plan would be developed for each unit, taking into consideration the type of action being planned, resource objectives, and mitigating actions needed to reduce negative impacts. Examples include: treatment, season of burn, time of ignition, firing tools, and moisture of predominant fuel type. Firing methods would be specific to each proposed unit and could include combinations of hand held drip torches, helitorches, and/or AIDS-primo ignition devices. The treatment unit would be treated primarily by understory burning or a combination of fuel treatment tools; i.e., broadcast burning, hand and mechanical thinning, hand piling, pile and burn, and mowing, to affect a desired improvement or objective.

Limiting mechanical ignitions within 100 yards of the riparian zone along the Chewaucan River would minimize the chances of introducing fuel into the river. Fire control equipment would be restricted from use along stream banks by topography, so vehicle impacts to riparian vegetation would be minimal. Cottonwood trees along streams would be protected from burning. Fire vehicles would be washed down at the Paisley Ranger District before being taken to the burn site, to minimize noxious weed spread potential.

Following the burn, the area would be rested from livestock grazing for at least two growing seasons. There would be no increase in grazing preference as a result of the prescribed burns.

Alternative No. 2 - Pre-treatment of hazardous fuels and prescribed burning in the Chewaucan watershed

This would result in a smaller scale cooperative Wildland Urban Interface (WUI) project consisting of both mechanical and manual pre-treatment and prescribed burning on approximately 5,000 acres within just the Chewaucan watershed (Map 1). The town of Paisley lies approximately 1 to 1.5 miles to the north of the proposed burn area. Approximately 3,500 acres are private and 1,500 acres are BLM administered lands. Private land would be included in the project area only if individual landowners choose to participate and enter into a cooperative agreement with the BLM.

In areas where juniper trees have encroached and are dominating the shrub and grass/herbaceous layer in the understory, juniper will be cut and/or slashed to replace the surface fuels that have been out competed. The BLM would develop a prescribed burn plan with input from the Paisley Ranger District and grazing permittees. Terrain barriers (the Chewaucan River), existing roads, an existing wildfire scar (2001), and a previous Forest Service prescribed fire (1999) would serve as burn unit boundaries.

Limiting mechanical ignitions within 100 yards of the riparian zone along the Chewaucan River would minimize the chances of introducing fuel into the river. Fire control equipment would be restricted from use along stream banks by topography, so vehicle impacts to riparian vegetation would be minimal. Cottonwood trees would be protected from burning. Fire vehicles would be washed down at the Paisley Ranger District before being taken to the burn site to minimize noxious weed spread potential.

Following the burn, the area would be rested from livestock grazing for at least two growing seasons. There would be no increase in grazing preference as a result of the prescribed burn.

Alternative No. 3 - No Action (continue current management)

This would result in no change in current management activities. The area would continue to be managed for livestock grazing and other uses and no prescribed burn would be conducted.

SECTION 3 - AFFECTED ENVIRONMENT

This section presents a brief description of the existing environment to serve as a baseline from which the impacts of the alternatives can be measured.

3.1 Climate

The climate in this area of south central Oregon, where the proposed project is located, ranges from hot summer days and temperate nights to severe winter cold. The average summer temperature is 66 degrees (F), and the average winter temperature is 31 degrees (F). The average annual precipitation is 11 inches, 70 percent of which falls between October and March. Wind is of variable speed predominantly from the southwest. The community of Paisley is at 4400 feet above sea level. The proposed project area ranges from 4500 to 6600 feet above sea level.

3.2 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.

3.3 Cultural Resources

The proposed project is within the area used historically by the Yahuskin Band of the Northern Paiute. Today, this group is part of the Klamath Tribes located in Chiloquin, Oregon. Several members of this group have knowledge of past uses and occupation within this area. Historically, the town of Paisley is located upon the location of a Northern Paiute village. There is evidence within the region to suggest that people have occupied the area for thousands of years. The mouths of streams, creeks, and rivers were often a focal point for use and occupation. Several types of sites could be expected within the area of the proposed project. Along the banks and edges of the Chewaucan River house pits might be present. None are currently known to exist, however the area has not been systematically surveyed. The area might also contain fishing stations, lithic scatters, and rock cairns or other rock constructs. It would not be expected that the steep slopes would contain concentrated sites although scattered lithic and stone tools might be expected. On rock outcrops rock art might be present. In the areas of upland basins and sink lakes, it would be expected that cultural material would be present. On surveys of the Coffee Pot Flat further to the south, numerous sites have been located. At other sink lakes in the area, sites are known to exist. Rock cairns might be expected on the peaks and plateau tops of the area. Cultural surveys would be required prior to conducting individual burn projects to determine the existence of such sites.

3.4 Vegetation

A wide range of vegetation occurs in the project area. Tree species include white fir (*Abies concolor*), ponderosa pine (*Pinus ponderosa*), cottonwood (*Populus deltoides*), aspen (*Populus tremuloides*), and willow species (*Salix spp.*). Western juniper (*Juniperus occidentalis*) has invaded most of the area. Shrubs include big sagebrush (*Artemisia spp.*), bitterbrush (*Purshia tridentata*), snowberry (*Symphoricarpos spp.*), and rabbit brush (*Chrysothamnus spp.*). Under story grass species include Idaho fescue (*Festuca idahoensis*), bluebunch wheatgrass (*Agropyron spicatum*), and basin wildrye (*Elymus cinereus*).

3.5 Fish and Wildlife Habitat

The Chewaucan River provides habitat for the Chewaucan variety of the Great Basin red band trout and speckled dace. Preliminary reports on population health and abundance indicate that the fish in the Chewaucan watershed are in good condition (Oregon Department of Fish and Wildlife, Jeff Dambacher, personal communication, January 2000).

The Paisley Ranger District led a watershed analysis completed in September 1999. This report found that BLM-managed river reaches (i.e., sections) were functioning appropriately for bank stability, potential stream type and number of pools. These reaches were not functioning properly with respect to presence of large wood (although it was noted that the site does not have the potential to naturally meet this requirement) and temperature.

The entire Chewaucan River watershed was considered to be not functioning properly with respect to upland forest vegetation (wildlife habitat) conditions. The primary factor for this rating was the lack of frequent and low intensity surface fires in the area. Recommendations were made in the analysis that prescribed fire be used as a tool to restore conditions for ground cover and aspen. Recommendations were also made to treat juniper woodlands to reduce soil erosion contributing sediment into the river.

Habitat is also present for a variety of wildlife species of interest including bighorn sheep (*Ovis Canadensis*), greater sage grouse (*Centrocercus urophasianus*), a few species of neotropical migratory birds, and nest sites for some raptors. Habitats include mountain mahogany groves, mountain shrub communities (mountain big sagebrush with a mix of antelope bitterbrush, and / or snowberry), low sagebrush communities, playas, juniper woodlands, and small rock outcrops. Much of the area is also mule deer winter range. The amount and distribution of mountain mahogany is limited within the project area. Most of these areas would be excluded from burning in order to maintain this diversity.

The only know federally listed species to occupy the project areas is the northern bald eagle (*Haliaeetus leucocephalus*). No nesting habitat is available for the bald eagle, but some foraging does occur within the project area, especially in winter. Potential habitat is present for other BLM sensitive species such as peregrine falcon (*Falco peregrinus*), ferruginous hawk (*Buteo regalis*), and burrowing owls (*Athene cunicularia*). None of these species are known to exist within the project area.

3.6 Recreation

Due to steep terrain and lack of vehicle access, recreational use in the project area is low and is concentrated along the Chewaucan River. Activities that occur include fishing, hiking, photography, wildlife viewing, and water play. These uses take place primarily during the warmer spring, summer, and fall months. Some fall hunting use may also occur on the slopes above the river.

3.7 Visual Resources

BLM-administered lands are classified according to their relative quality from a visual resource management (VRM) point of view. Because it is neither desirable nor practical to provide the same level of management for all public lands, visual resources are evaluated to determine the appropriate level of management. The visual resources in the proposed project area are managed under Class IV, which is the lowest level of protection. This class generally includes areas with low scenic qualities and medium to low sensitivity levels. Under Class IV objectives, scenic quality may be modified, and landscape alterations may dominate the view and become the major focus of viewer attention. The level of change to the characteristic landscape can be high.

The proposed project area is along one side of a moderately steep-sided drainage. Although the lower slopes are visible from the river and the paved forest road, some of the mid and upper-portions of the proposed burn area are out of sight. While riparian vegetation is dense next to the river, the mid-slope area is relatively open and dominated by grasses, shrubs and scattered juniper, with juniper, aspen, and ponderosa pine appearing in the upper reaches and in the side drainages.

3.8 Range Administration

The project area is in the Fir Timber Butte pasture of the Fir Timber Butte Allotment (# 412). The allotment has two pastures. The Fir Timber Butte pasture has not been grazed since 1987. Most of the grazing has occurred in the second pasture, Mill Creek, in spring and summer (May 1 to June 15). Fifty- eight animal unit months (AUMs) of grazing are permitted in the allotment. The project would also affect the Jones Canyon allotment (#411) and the Hill Field allotment (#423). Jones Canyon is used for trailing purposes in the spring and fall and the Hill field is grazed in the spring.

3.9 Special Status Plant Species

Melica Sticta, a BLM special status plant species, is known to occur in area and the area would be inventoried for other plants before the burn is conducted**.** There is no evidence that fire is detrimental to the grass, which grows in rocky out crops.

3.10 Noxious Weeds

No known noxious weed sites exist in the proposed project area. There has not been a comprehensive inventory of the area for weeds in several years. The area would be surveyed for noxious weeds before the burn is conducted. The likelihood that weeds would be detected is high. Cheat grass (Bromus tectavor) (non-noxious) is known to occur in the area. Surveys would be performed prior to the burn to determine the probability of spread of cheat grass. Prevention or mitigation measures would be developed to minimize potential for establishment/invasion of cheat and other weeds. Burning would remove vegetative material and greatly increase the potential to introduce noxious weed seed to the area.

SECTION 4 - ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

The following elements have been considered and either are not present in the project area, or would not be affected by any of the alternatives considered: Areas of Critical Environmental Concern, Research Natural Areas, prime and unique farmlands, flood-plains, solid or hazardous waste, drinking and ground water quality, wetlands, wild or scenic rivers, wilderness values, minerals, paleontological resources, wild horses, land tenure, or minority or low-income populations.

4.2 Alternative No. 1 (Preferred)

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

Where a fire break is constructed anywhere other than using natural barriers and roads, a Class III survey for cultural resources would be conducted prior to building the line. Consultation with the

area tribes: Klamath, Bidwell, Burns, and the Confederation of Tribes at Warm Springs would be completed to determine if there are any concerns. The burn itself should result in no effects to cultural resources, since the burn, as planned, would be of low intensity.

Vegetation

Tree and shrub species would be most affected by burning. Western juniper is expected to decrease, which is desirable for improving the health of the watershed. Aspen and cottonwood species are expected to increase by means of re-sprouting. Protection of these sprouts from future wildlife until fully established might be necessary to ensure their survival, although unconsumed juniper skeletons would contribute to that survival rate. Burning would have a positive impact on most grass species. Grasses should increase in number and vigor within two years of the fire. Mountain big sagebrush would be expected to recover within five to ten years through natural regeneration of existing seed sources. Burning should have little effect on the larger ponderosa pine, which is adapted to fire, however, seedling trees would be damaged or killed. Regeneration from existing seed would coincide with grass stabilizing the area. Riparian vegetation would be expected to improve several years after burning occurs.

Fish and Wildlife Habitat

Western juniper wildlife habitats would be reduced within the project area. This would result in lower densities of some bird species such as American robin (*Turdus migratorius*), chipping sparrows (*Spizella passerina*), mountain bluebirds (*Sialia currucoides*), dark-eyed juncos (*Junco hyemalis*), ash-throated flycatchers (*Myiarchus cinerascens*), Cassin's finches (*Carpodacus cassinii*), and mountain chickadees (*Poecile gambeli*). Removal of juniper, however, would likely result in increases of vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*), green-tailed towhee (*Pipilo chlorurus*), Brewers sparrow (*Spizella breweri*), sage sparrow (*Amphispiza belli*), sage thrasher (*Oreoscoptes montanus*), and horned lark (*Eremophila alpestris*) populations (Reinkensmeyer *et. al.* 2000). Most treatments would be completed in the fall and winter, thereby reducing negative impacts to nesting birds. Some mechanical juniper treatments could be completed in the spring and summer, but this would be minimal due to access issues with wet soil in spring and fire restrictions in summer.

A reduction western juniper and sagebrush cover and increase in native grasses would be beneficial to bighorns sheep in some areas of the proposed project. This would reduce cover for predators and increase the forage base allowing for additional habitat that has previously been unavailable. Some habitat would be reduced for sage grouse and wintering mule deer. Some negative impacts would occur to wintering mule deer. Many of these would be from the removal of available bitterbrush and mountain big sagebrush as forage. Some cover would also be reduced, but these impacts are expected to be minimal.

Some nesting cover would be reduced for sage grouse. Beneficial impacts from the removal of invasive juniper would outweigh any negative impacts from prescribed fire on this site. Sage grouse nesting cover would be maintained in a mosaic pattern where available on the landscape.

Mountain big sagebrush areas burnt with prescribed fire would be expected to return to sage grouse habitat within 15 – 20 years. Low sage communities appear to be used during the spring, winter, and early brood rearing periods. These sites would be beneficially impacted be mechanical removal of juniper.

Nesting habitat for raptors along the small cliffs and rock outcrops would not be impacted by the proposed activity. Foraging areas for most raptors would improve after removal of western juniper. No negative impacts to raptors would be expected from the proposed project. No impacts would occur to any federally listed, or Bureau sensitive species.

A reduction of overland flow, erosion, and sediment input into the Chewaucan River would result as herbaceous vegetation occupies area that is currently barren underneath juniper stands. There may be a short term increase in sediment input when the initial cover is removed, but over the long term improvement would occur. Sediment reduction would benefit aquatic species in the Chewaucan River.

Recreation and Visual Resources

There would be short term, minimal impacts to recreational activities and visual scenery. Smoke during the actual burning could impair visibility in the canyon and could cause recreationists to curtail their visit until the smoke clears out. The darker burned area and blackened trees would be visible for a few months, but vigorous regrowth of grasses and riparian vegetation would occur to compensate for the contrast. Fire line construction between the National Forest and BLM lands could be visible in places from the paved road below, depending on its location and use of natural barriers.

Range Administration

There would be minimal impact to grazing on the Fir Timber Butte Allotment since most of the burn is proposed in an unused pasture. During the rest period after burning, grazing use may be shifted to the Five-Mile Butte Allotment, Mill Creek pasture or to the unburned pasture of the Fir Timber Butte Allotment. No impacts to range administration would occur in the long-term. Grazing would continue under the current grazing plan. No increase in forage allocated to livestock would occur.

Special Status Plant Species

Nodding Melica grass is the only known BLM special status plant species to occur in the area. Fire is not expected to have a negative impact on the grass species in the long term. Because the sagebrush-steppe ecosystem has evolved with recurring fire, it is likely that any native plant species is adapted to fire. It is possible that some native plant species, currently unknown to occur in the area, would be seen following the burn.

Noxious Weeds

Any noxious weeds found in the area which can be spread by fire would be controlled prior to burning, or left unburned if control cannot be achieved.

4.3 Alternative No. 2

With the exception of fish and wildlife habitat, recreation, and visual quality resources, the impacts would be the same as Alternative 1, except no fire line would be built along the BLM/FS boundary, so there would be no ground disturbing work done.

Fish and Wildlife Habitat

Impacts to fish and wildlife species and their habitats would be same as in Alternative 1, but on a much more limited scale. Positive impacts to sage grouse, other sagebrush obligates, bighorn sheep, and other species would be reduced. Negative impacts would be expected to increase in the long term due to increasing density and expansion of western juniper stands. These would be especially detrimental for bighorn sheep and sage grouse populations in the area. No impacts would occur to any federally listed, or Bureau sensitive species.

Recreation and Visual Resources

There would be less long-term visual impact under this alternative since a fire line would not be built, and total project acreage would be less. There would be a greater short-term impact to recreation and visual quality compared to Alternative 3 due to the number of acres burned.

4.4 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

Not burning in the Chewaucan watershed could result in more intense, uncontrolled wildfires that can alter site material, destroy standing structures, and make large areas of sites visible to artifact collectors.

Vegetation

This would allow gradual to moderate rates of establishment of juniper, and subsequent habitat modification. Current shrub densities and cover could be expected to maintain their current

levels or increase slightly. A decline in forb and grass diversity productivity could also be expected as woody plants increasingly occupy and modify the environment. Aspen stands would eventually die out due to juniper invasion. Also the decline in forb production would continue to allow fine sediment from side channels to deposit into the Chewaucan River. Wildfires could result in a larger loss of vegetation compared to Alternatives 1 and 2, due to the fire burning under extreme, uncontrolled conditions.

Fish and Wildlife Habitat

No action will lead to a gradual decline in under story forbs and grasses and an increase of juniper and sagebrush cover. Overland flow and erosion would increase putting more sediment into the Chewaucan River.

This would result in a gradual increase in western juniper density and expansion into new areas. This would have negative impacts to sage grouse, bighorn sheep and many other sagebrush obligates. These negative impacts would increase over time and would eventually change the habitat enough that it would no longer be suitable for some sagebrush obligate species and bighorn sheep. No impacts would occur to any federally listed, or Bureau sensitive species.

Recreation and Visual Resources

There would be no impact to recreation or visual resources unless a wildfire occurred, and then the impact would the similar or greater than Alternatives 1 and 2.

Range Administration

Grazing would continue under the current Allotment Management Plan (AMP). In the event a wildfire occurs in the future, grazing could be removed from the burned portions of active allotments/pastures for a minimum of two growing seasons to allow for vegetation recovery.

Special Status Plant Species

There would be no significant change in special status plant species or their habitat unless a wildfire moved through the area.

Noxious Weeds

The current risk of noxious weed invasion would continue. In the event a wildfire occurs in the area in the future, the risk would be substantially increased due to the presence of bare ground.

4.5 Secondary, Indirect, and Cumulative Impacts

Reintroduction of fire as a management tool would have a positive effect in the project area and the surrounding watershed. Similar projects are planned on adjacent National Forest and

possibly private lands in the watershed. The cumulative effect would continue to reestablish fire as a natural part of the ecosystem and improve the ecological diversity and habitat richness of the watershed.

SECTION 5 - CONSULTATION AND PUBLIC INPUT

5.1 Public/Interagency Involvement

The Environmental Assessment will be made available to the public, other agencies, and tribal governments.

SECTION 6 - PARTICIPATING INTERDISCIPLINARY STAFF

Heidi Albertson	Rangeland Management Specialist
Philip Blythe	Prescribed Fire- Fuels
Bill Cannon	Archaeologist
Todd Forbes	Wildlife Biologist
Lucile Housley	Botanist
Trish Lindaman	Recreation Specialist
Alan Munhall	Aquatic Biologist
Barb Machado	Hydrologist
Erin McConnell	Natural Resources Specialist Weeds
Joliet Pollet	Fire Ecologist
Theresa Romasko	Rangeland Management Specialist
Matt Webb	Prescribed Fire- Fuels
Paul Whitman	Planning & Environmental Coordinator

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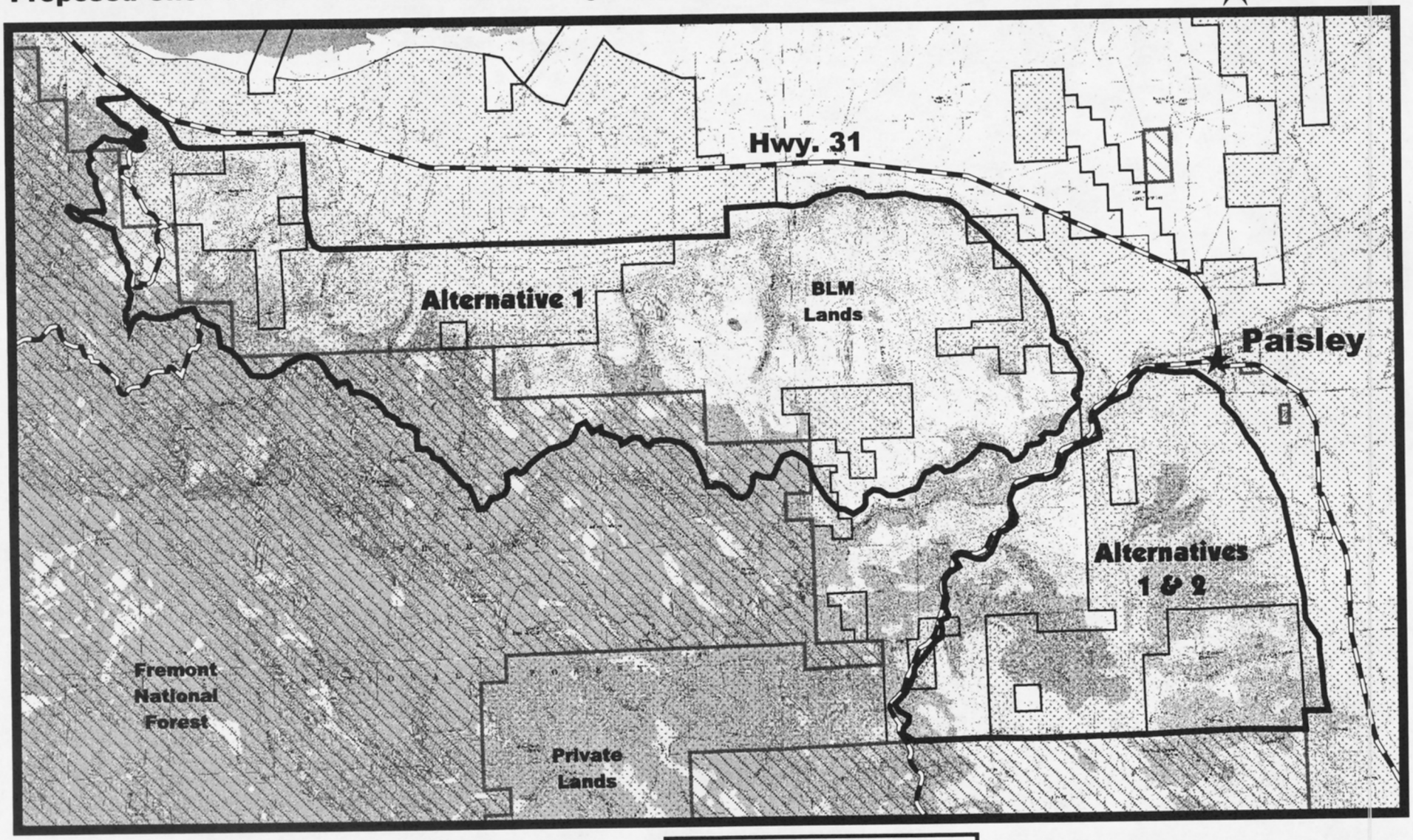
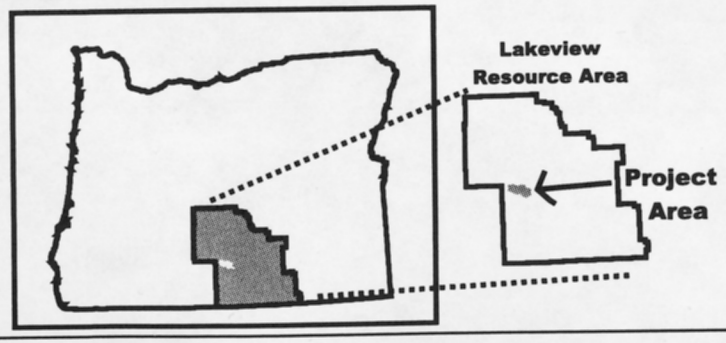
Map 1 -

Proposed Chewaucan Prescribed Burn Project Area





Project Area
Fremont N.F.
Private Lands
BLM Lands

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