

ENVIRONMENTAL ASSESSMENT

Cathedral Hills Hazardous Fuels Reduction and Recreation Management

EA# OR117-05-11

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
GRANTS PASS RESOURCE AREA

August 2005

Dear Reader:

We appreciate your interest in the BLM's public land management activities. We also appreciate your taking the time to review this environmental assessment (EA). If you would like to provide us with written comments regarding this project or EA, please send them to Abbie Jossie, Field Manager, Grants Pass Resource Area, at 3040 Biddle Road, Medford, OR 97504.

If you would like to comment confidentially, please be aware that comments, including names and addresses of respondents, will be available for public review or may be held in a file available for public inspection and review unless you request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this clearly at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or officials of organizations or businesses will be made available for public inspection in their entirety.

I look forward to your continued cooperation in the management of our public lands.

Abbie Jossie
Field Manager
Grants Pass Resource Area

Cathedral Hills Trail Reconstruction/Construction

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1.0 Introduction

The purpose of this environmental assessment (EA) is to assist in the decision making process by assessing the environmental and human effects resulting from implementing the proposed action or alternatives. This EA will also assist in determining whether an environmental impact statement (EIS) or a finding of no significant impact (FONSI) is appropriate. This EA tiers to or is consistent with the following documents:

1. Final EIS and ROD for the Medford District Resource Management Plan (RMP) (June 1995)
2. Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl (February 1994)
3. ROD for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (NFP) (April 1994)
4. ROD and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (January 2001)
5. ROD Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests within the Range of the Northern Spotted Owl. Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy (March 2004)
6. ROD to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Document within the Range of the Northern Spotted Owl (March 2004)
7. Final Supplemental EIS (December 2003), ROD and Resource Management Plan Amendment for Management of Port-Orford Cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg Districts (May 2004)
8. Cathedral Hills Trails Management Plan (August 2003).
9. Josephine County Integrated Fire Plan (November 2004).

This project also implements the National Fire Plan and complies with the 2003 Healthy Forests Restoration Act, Title 1, which authorizes expedited vegetation treatments on certain types of lands that are at risk of wildland fire.

1.1 Purpose of and Need for the Proposal

The broad purpose of the proposed action is to implement the Medford District's Resource Management Plan (RMP). Cathedral Hills is one of 12 Recreation & Public Purposes (R&PP) leases identified in the RMP to be managed for recreational uses. The purpose of the proposed action is to improve trails in Cathedral Hills and reduce resource damage, conflicts between trail users, and hazardous fuel conditions. A secondary purpose is to improve wildlife habitat.

Poorly located, degraded, and user created trails in Cathedral Hills need to be addressed. Trail associated infrastructure (signing, trailhead improvements, toilets, etc.) also need to be added.

Fuel hazard needs to be reduced. The wildland-urban interface area around Grants Pass has been identified in the National Fire Plan as a community at risk for wildland fire. The project area is completely bordered by private land, many with private residences, and Josephine County land. In

most cases, dense vegetation found throughout the project area occurs right up to residential property boundaries, prompting a request from homeowners and Josephine County for the BLM to address this fuel hazard. More than 45 years of fire exclusion has resulted in flammable vegetation accumulation and increased wildfire hazard. To reduce fire behavior, vegetation density (surface and ladder fuels) and vegetation structure would be modified. National Fire Danger Rating System (NFDRS) fuel model changes characterize this objective (given a moderate 5 mph summer wind):

- In brush fields where vegetation is continuous and at least 6' tall (fuel model 4), reduce brush from 13 tons/acre to approximately 4 tons/acre and break up fuel continuity (fuel model 5). Flame length would decrease from 19' to 4'.
- In timbered conifer and hardwood stands, reduce stand density and litter accumulation (fuel model 9 reduced to a fuel model 8). Ground fire flame length would decrease from 2.6' to 1'.
- In timbered stands, reduce stand density and litter accumulation (fuel model 10 reduced to a fuel model 8). Ground fire flame length would decrease from 4.8' to 1'.
- Reduced fuel loadings and fire hazard would be maintained over time with follow-up treatments.

Maintain or improve wildlife habitat, especially in oak woodlands, in conjunction with prescribed burning due to brush and conifer encroachment and degrading habitats.

1.2 Project Location

Cathedral Hills Park is located east of Highway 238 (Williams Highway) and west of Cloverlawn Drive, approximately 2 miles south of the town of Grants Pass, Oregon, in Josephine County (See Map 1: Vicinity Map).

The portion of Cathedral Hills Park that would be treated consists of two BLM parcels in T36S, R5W, Sections 29 and 31. One parcel is 342 acres and the other, 80 for a total of 422 acres.

1.3 Land Use Allocation and Objectives

The project area is managed by Josephine County Parks under a Recreation and Public Purposes Lease. The objectives are to maintain recreational opportunities. More specifically, the lease, which was established in 1963 and renewed for 25 years in 1984, designates the area for hiking and horseback riding. In 1966, the area was closed to motorized use in response to complaints about noise and trail damage. When the R&PP lease expires in four years, the BLM will likely regain management responsibility for this area.

2.0 Proposed Action and Alternatives

2.1 Alternative 1: No Action Alternative

In this EA, the "no-action" alternative is defined as not implementing any aspect of the proposed action alternative(s). Therefore, the no action alternative also serves as a baseline or reference point for evaluating the environmental effects of the action alternative. Inclusion of this alternative is done without regard to whether or not it is consistent with the Medford District RMP.

The no action alternative is not a static alternative; implicit is a continuation of current environmental conditions and trends in the project area including vegetative succession, habitat changes, erosion and fire hazard.

2.2 Alternative 2: Proposed Actions

2.2.1 Fuels Reduction and Wildlife Habitat Enhancement

Initial Fuel Hazard Reduction

Vegetation would be thinned using manual techniques. Trees cut would be $\leq 7''$ DBH. Trees and brush $\leq 7''$ DBH may be left standing to achieve spacing of 14' to 30' between leave trees. Madrone trees $\geq 3''$ DBH would be retained. Cutting and piling would take approximately 6-8 weeks and may occur over several months during the fall, winter or spring. Slash would be piled by hand, covered to provide a dry ignition point and then burned in the winter.

Woodland Habitat

Douglas-fir $\leq 7''$ DBH would be cut to achieve leave tree spacing of 14' to 30'. In areas dominated by pine or cedar, all Douglas-fir $\leq 7''$ DBH would be cut.

Single stem madrones $\leq 3''$ DBH and oaks $\leq 7''$ DBH would be cut.

Trees with live crown ratios $\geq 30\%$ would be retained at a density of 16-35 trees/acre. Priority species for retention would be oak, madrone, pine and cedar followed by Douglas-fir. Some cedar and oak seedlings and saplings would also be retained.

Tall, old manzanita that produce large berry crops would be retained at a density of ≤ 6 /acre. Shrub clumps up to 10' in diameter spaced approximately 25'-35' apart would also be retained.

Approximately 15-20% of each treatment area would remain untreated. These untreated areas would be $\frac{1}{4}$ acre or larger, at least 100' apart, and would be well distributed throughout the project area.

Untreated oak woodland islands (approximately two per acre) would be 25'-35' in diameter.

In areas dominated by dense brush, at least two islands per acre of brush would be left untreated. These islands would be approximately 25' to 35' in diameter and would be approximately 50-100' apart measured from the outer perimeter. In addition to islands, moister microsites (often found on north aspects or in land form depressions) would also remain untreated. These moist sites historically would have had less frequent fire compared to surrounding areas and would likely have contained larger, more mature shrubs. On the outer edges of these islands, ceanothus and manzanita tops would be cut to promote crown growth and wildlife forage. Acceptable loss of these islands during burning would be $<20\%$.

Follow-up Maintenance

Within 5 years following the initial treatment, approximately 90% of madrone (and some oak) re-sprouts (one stem on each plant would be retained) would be cut. The project area would be divided into 5 to 15 burn units and 18'' wide fire line would be cut around each unit using hand tools. The area would then be under burned in a low intensity, mosaic pattern. Approximately 70% of the slash that

was left over from the initial treatment and from this follow-up treatment would be consumed. Additional hardwoods and conifers would be cut and left on site in some areas to achieve greater leave tree spacing (closer to the 30' upper limit).

2.2.2. Recreation

Recreation treatments include: 1) trailhead improvements, 2) trail restoration, relocation, or decommissioning, 3) directional signing, 4) bench, picnic table and hitching post installation, 5) hazard tree removal, 6) boundary/property line delineation, and 7) noxious weed removal. These activities are expected to be completed within 5 years.

The proposed action is to:

- provide approximately 30 additional parking spaces at 3 trailheads including trailer parking and turn around capabilities.
- decommission and rehabilitate 4 miles of trail
- relocate 4.8 miles of trail
- install 25 directional signs at trail junctions
- install benches, picnic tables and hitching posts at trailheads and rest areas
- post property boundaries and private trails
- install interpretive signs regarding unique features and the importance of staying on the trail.
- install vault style restrooms

The trails would continue to be open to non-motorized uses, such as hiking, horseback riding and mountain bicycle riding. The area would continue to be closed to motorized vehicles, camping, hunting and campfires. These closures would be published in the Federal Register. In addition to publishing these closures in the Federal Register, press releases and contacts with user groups would help inform the public of these closures and facilitate compliance.

Trailhead Improvements

Espy Road Trailhead

The trailhead would be enlarged to the north from 0.2 acres to 1.50 acres which would accommodate approximately 20 vehicles, 10 trailers, three picnic tables, a concrete vault toilet, hitching posts and potable water. The parking area would have improved drainage and would be surfaced with crushed aggregate and would be designed for trailer parking/loop turnaround circulation. An old pit toilet foundation would be removed. The existing well would be left in place and signed as not containing potable water until the city water system is expanded to the site. A detailed Cathedral Hills map would show major land features, trails, streams and draws, BLM boundaries, and other features. Other interpretive signs, brochures and trail maps would be available on site.

Skycrest Trailhead

The trailhead would be enlarged to the south from 0.01 acres to 0.65 acres to provide parking for approximately 10 vehicles. The parking area would have improved drainage and would be surfaced with crushed aggregate and would be designed for trailer parking/loop turnaround circulation. The parking area would be constructed at least 10' away from the draw. Two 18" culverts, two picnic tables, a vault restroom and an informational kiosk would be installed.

Walker Road Trailhead

This trailhead is located on Josephine County land adjacent to BLM and is integral to and managed as a part of Cathedral Hills Park. Within this parcel, the Cloverlawn trail, (starting at the Walker Road trailhead) runs through it from east to west. This trail serves as an access point on the eastside of the project. The existing trailhead is very small, provides parking for one or two small vehicles (no trailer parking), and does not have a turnaround. The trailhead would be enlarged to the west from 0.03 acres to 0.95 acres to provide parking for approximately 10 vehicles and would be extended to the old irrigation ditch. The parking area would have improved drainage and would be surfaced with crushed aggregate and would be designed for trailer parking/loop turnaround circulation. An informational kiosk and vault restroom would be installed.

Trail Restoration

There are approximately 12 miles of trails in the project area. Many of these trails are in various states of disrepair, are poorly located, or are steep and eroding. Appendix A, Map 3 shows the proposed closure (decommissioning), reroute, or upgrade of these trails.

Trail Decommissioning

Decommissioned trails would be water barred, signed, and blocked with slash from fuels work and trail construction to discourage use. Trails with grades less than 15% would be lightly scarified, seeded with native plants, and mulched with weed free straw. For steeper trails, multiple berms would be built perpendicular to the trail bed using a trail machine. Drainage dips and water bars would help restore natural drainage patterns.

Trail Relocation

Trails that are actively eroding, are on unstable surfaces, or are poorly located in drainages or along steep slopes would be rerouted. In most cases of trail decommissioning, a new rerouted trail would be constructed and would have an average 10% grade. In some areas, new trails would provide additional recreational opportunities.

Trails would be 3' wide on a full bench prism with no fill slopes. Chainsaws, trail building machines, or hand tools may be used. Some vegetation would be removed, primarily shrubs or small trees, and would be scattered below the trail to blend with the natural landscape or utilized in trail decommissioning. For hiking and horse back riding, trails would be brushed 10' vertically and 4' on each side of the centerline.

Existing mountain bike trails have not been built to BLM standards. They are approximately 2' wide and are steeper and have a lower/narrower clearing distances than BLM standards. Several of these trails would remain in their current condition and would be recommended for mountain bike use only. Some steep sections would be decommissioned. See Map 3 for trails that would be managed for mountain bicycles.

Drainage Structures

Water bars or cross drains would be positioned at a 20-30° angle to the direction of the trail, spaced 35-175' apart based on soil type and slope, and would be deep enough to carry the water without overly impacting trail users. Trails would be outsloped (3% grade) by removing the outside berm and using the material to recontour the tread. Rolling dips would carry water off

the trail. Where the outside berm is too high, ditches would divert water off the trail. Water bars would be built by hand or track mounted machine. If machinery is used, the trail would be “dipped” on the uphill side of the water bar or cross drain to increase its stability and life span.

Crossings, Culverts and Bridges

Where needed, culverts, bridges or rock crossings would be installed. Culverts would be at least 18” diameter. Bridges would support hikers, cyclists and equestrians and accommodate high water flows.

Directional Signing

Directional signs along the trails would be made of wood with routed lettering.

At each trailhead, kiosks would provide maps and safety information. Interpretive signs would be installed at the Espey Road trailhead as funding allows.

Other signs would be placed throughout the trail system to inform users about safety issues and yielding to other types of trail use (horses, cyclists, hikers).

Signs would be placed at major intersections in town, outside the project area, to direct visitors to the main trailheads.

Bench and Picnic Table Installation

At 6-10 viewing areas, picnic tables and/or benches would be installed. Some vegetation would be cut in accordance with fuels prescriptions to expand vistas of the valley and city.

Hazard Tree Removal

There are many dead trees (snags) along the different trails. Many of these trees have recently died and others have been dead for several years. The size of these dead trees varies from small, medium to large. Some may be up to 24” in diameter.

Those that lean towards trails are a hazard to users especially during winter storm events. During this time it is more likely that they would topple over because of the soft, wet soil and high wind. Falling the trees would reduce some of the hazard.

Hazard trees (some are 24” DBH) would be felled and left on site. In concentrated pockets, some felled trees would be left on site but most would be cut up and the slash hand piled.

Property Boundary Delineation

The boundary of the 422 acre parcel would be delineated with carsonite-type signs placed along the BLM and private property boundary, identifying private/federal property.

Noxious Weeds

Noxious weeds (Himalayan blackberry, scotch broom, English ivy and bull thistle) are at levels that may be controlled or eradicated by manual or mechanical methods.

2.3 Project Design Features

Soils and Hydrology

Areas of known or potential soil instability would not be treated.

Neither under burning ignition nor hand pile burning would occur within 10' of ephemeral draw bottoms. However, fire would be allowed to creep into draw bottoms.

Under burns would be cool burns, typically occurring in the spring, late fall or winter. Mineral soil exposure would be discontinuous and would not exceed 20% of the project area.

No treatments would occur within 50' of stream channels. Under burns would be allowed to creep into the 50' stream buffer.

Botany and Weeds

For Special Status species, buffer size would be determined on a case-by-case basis, depending on the species and its habitat requirements but would have a minimum 20' radius for sensitive species.

Burning through identified Special Status plant population areas would be avoided or minimized depending on the adaptability of each species to fire.

Noxious weeds would be treated using an integrated pest management approach (RMP p. 92). Infestations would be contained or eradicated using appropriate methods based on species and conditions in compliance with the Medford District Integrated Weed Management Plan. Treated sites would be monitored.

Seed and straw would be weed free.

Heavy equipment would be cleaned prior to moving onto BLM lands and when moving from known noxious weed areas into weed-free areas.

Wildlife

Snags >12" DBH would be protected from thinning treatments or hand pile burning. Snags felled during hand line construction and existing large down wood ≥ 16 " diameter would be left on site and protected from burning. No treatments (thinning, hand pile burning or fire line construction) would occur within one tree height of hazardous snags. No hand pile burning or fire line construction would occur within one tree height of the largest retained snags, >20" DBH.

Hazardous trees felled adjacent to trails would be left for large wood.

Habitat islands would be protected from under burning by pulling back cut vegetation.

If raptors are found nesting in the project area, seasonal operating restrictions appropriate to the species would minimize potential impacts to reproductive success.

Cultural Resources

All known cultural sites have been flagged and would be avoided. If any cultural resources are located during project implementation, work would stop and a cultural resource specialist would be contacted to determine the site's significance.

No mechanical operations would be conducted in cultural resource site buffers. Trees would be felled away from cultural buffers. No fire line construction, hand piling or burning would occur in cultural resource site buffers.

Health and Safety

Burning would be conducted under weather and fuel moisture conditions that would result in a low intensity burn to help ensure safety and controllability. Adequate fire suppression resources would be available during burning. A helicopter with water bucket may be used during mop up to help extinguish larger burning fuels and prevent reburn through the mosaic of remaining vegetation.

Prescribed burning would comply with the Oregon Department of Forestry's Smoke Management Program and the Department of Environmental Quality's Air Quality and Visibility Protection Program. Additional measures to reduce smoke would include: mopping up as soon as practical after the burn; burning with lower fuel moisture in the smaller fuels to facilitate quick and complete combustion; burning with higher fuel moisture in the larger fuels to minimize consumption and burn out time; and covering hand piles to permit burning during the rainy season where there is a stronger possibility of atmospheric mixing and smoke dispersal and reduced risk of an escape fire.

Recreation

Along the trail, single large manzanita (>4" DBH) would be retained. A visual corridor of 20' on either side of trails would be established. In this corridor, fuels treatment would be lighter, and feathered by leaving at least 200 stems per acre (15' spacing).

3.0 Environmental Effects

Current conditions in the project area result from a multitude of natural events and human actions that have taken place over many decades. Cumulative effects are defined as the, "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 CFR § 1508.7). A description of current conditions inherently includes the effects of past actions and serves as a more accurate and useful starting point for a cumulative effects analysis than by "adding up" the effects of individual past actions. "Generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." (CEQ Memorandum 'Guidance on the Consideration of Past Actions in Cumulative Effects Analysis' June 24, 2005.) Cataloging past projects and their individual effects would not be useful in discerning the incremental impact of this project. However, ongoing and foreseeable projects in the watershed that are relevant to the effects of the proposed action are discussed below. By comparing the "no action" alternative (current condition) to the action alternatives, we can discern the "cumulative impact" resulting from adding the "incremental impact" of the proposed action to the current environmental conditions and trends.

Scoping for this project did not identify a need to exhaustively list individual past actions or analyze their environmental effects in order to fully analyze the effects, including cumulative, of this project's action alternatives. No individual past actions have been identified that would have a cause-and-effect relationship with these proposal.

The project area is in the 53,640 acre Grants Pass 5th field watershed. In the watershed, 12,539 acres (23%) are administered by BLM and 41,101 acres (78%) are state, county or private. Most of the BLM lands are in various types of reserves (LSR, riparian, RNA, etc.).

Various past activities have shaped the current condition and are considered in the cumulative effects analysis. Past, ongoing, or reasonably foreseeable activities on federal land in the Grants Pass 5th field watershed include the Savage Green, Bloody Jones, Birdseye Jones, West Fielder, and Bald Bluiie Landscape Management Projects, as well as approximately 800 acres of hazardous fuels treatments.

Rotational harvest on private timber lands and residential and agricultural development have decreased vegetative cover in the watershed. Private land harvest and residential development are expected to continue.

3.1 Soils and Hydrology

Affected Environment

The project area is in the Allen Creek (11% BLM land) and Fruitdale Creek (21% BLM land) 7th field watersheds which are in the Lower Rogue-Grants Pass 6th field watershed. Elevations range from 1,080' -1,760'. The average annual precipitation is 32-34". The project area contains ephemeral draws and seven intermittent streams. All of the intermittent streams are in the Allen Creek watershed. The two 7th field watersheds do not have any 303(d) water quality limited streams.

Soils in the project area are predominately Siskiyou with some Holland soils primarily in the central and west edge of project area in section 31. The Siskiyou soil type is derived primarily from granitic parent material. It is 20-40" deep to weathered granodiorite with gravelly sandy loam surface layers over sandy loam subsoil. Soils are excessively drained and susceptible to erosion when the mineral surface is exposed. Siskiyou soils usually have thin surface duff layers that help protect the mineral soil; however, because the duff and litter layer is usually less than an inch thick, these soils are vulnerable to concentrated flow erosion. Furthermore, the top soil is thin and can be easily lost, resulting in low soil productivity. Siskiyou soils occur on upland slopes.

The Holland soil is 40-60" deep to highly weathered granodiorite with sandy loam surface layers over sandy clay loam subsoil. It is well drained and susceptible to erosion when the mineral surface is exposed. The surface mineral soil has low cohesion and tends to erode easily when subject to concentrated flow though slopes are not as steep as for the Siskiyou so the energy of concentrated surface flow is less.

Alternative 1: No Action

Under the no action alternative, soil and water conditions would remain the same. However, a high intensity wildfire could adversely impact soils and water due to the following:

- Increased erosion and sedimentation over the short term. Revegetation would occur slowly.
- Reduced soil productivity due to loss of soil organic matter.
- Increased soil compaction due to road development or heavy equipment use for fire suppression.
- Increased peak flows and water yield due to reduced vegetative cover and evapotranspiration.

Alternative 2: Proposed Action

Table 1. Soil Impact Summary Comparison			
Duration	Indicator	Alternative 1 (No Action)	Alternative 2 (Proposed Action)
Short term (1-5 yrs)	Disturbance / Erosion	No change	No change
	Organic Matter		
Long term (5-20 yrs)	Disturbance / Erosion	Slight negative (assumes occurrence of a moderate to high intensity fire)	Slight positive (assumes ongoing management)
	Organic Matter		

During under burning, large woody debris would not be consumed and the majority of the duff layer would be maintained, thus minimizing any risk of erosion.

A short term, minimal reduction of vegetative cover and evapotranspiration (and consequent increase in infiltration) would be moderated by improved location and trail design which would result in a localized, negligible/non-measurable increase in water yield. Overall trail length would be increased by 0.8 miles. However, improved trail placement and design would result in an overall decrease in sediment and erosion.

In the event of a wildfire following fuel hazard reduction, fire intensity would be less than without treatment. No short or long term increase in stream temperature is anticipated. All fuel treatments would cause minimal exposure of mineral soil with no continuous routes to stream channels. There would be little slope distance (about 6' per burn spot) of exposed mineral soil, thus minimal localized erosion and no additional sediment is expected. Stream shade would not be reduced. Vegetation would recover rapidly after treatment due to shrub sprouting and seed germination. Root strength would be maintained or enhanced and leaf litter would increase rapidly. No long term adverse effects are expected.

Cumulative Effects

Even with the knowledge and expectation that similar treatments (approximately 800 acres of fuels work is either ongoing or foreseeable) are occurring and would occur on private land and approximately 1,100 BLM acres in the watershed, no increases in cumulative hydrologic effects at the 5th, 6th, or 7th field level are anticipated because no additional short term or long term effects are anticipated. This is primarily due to: 1) treatments on BLM lands are designed to have no effect or, at the most, only very minimal adverse effects on hydrology and soils such that when the effects are combined, they would still be minimal at the 7th field scale; and 2) because the treatments are likely to occur at different times, and their effects are minimal and short term, it is not anticipated that their impacts would be cumulative. This project would not contribute cumulatively to adverse impacts on long term soil productivity, stream channel integrity, water quality, surface water yield, or peak or low flows.

3.2 Botany

Affected Environment

Vascular plant surveys for Bureau special status (BSS) species were completed in May 2004. The project area is located within the range of the federally endangered *Fritillaria gentneri*. Although suitable habitat exists, no populations were found.

Two BSS populations were located during surveys, *Cypripedium fasciculatum* and *C. montanum*. Both were located in Section 31. *C. fasciculatum* and *C. montanum* habitat are typically found where moist conditions prevail. These orchid species are very long-lived; perhaps as long as 95 years (Mgmt. Recommendations 1998). It can take up to 15 years for them to emerge above ground and they require specific mycorrhizal (underground fungal) connections for germination. Intact organic soil profiles with these fungal connections are an important habitat feature for new population establishment. These fungal connections are important not only for establishment, but also during early dormant (underground) years and potentially throughout the life cycle of these orchids. The range of *C. fasciculatum* extends from northern California through Washington and east into Idaho, Montana, Wyoming, Utah and Colorado. The range of *C. montanum* is found throughout California and into Washington and east into Idaho, Montana, Wyoming, and Utah as well as Alaska.

A recent assessment made by the Oregon Natural Heritage program has downlisted *C. fasciculatum* from List 1 to List 2 for the state of Oregon due to its global ranking of 4. A global ranking of 4 means “the species is not considered rare and apparently is secure, but with cause for long-term concern, usually with more than 100 occurrences” (NatureServe website 2005). *C. montanum* has a global ranking of 5 which means it is “demonstrably widespread, abundant and secure”.

Non-vascular BSS surveys were completed in August 2005. None were found.

Surveys for special status fungi species have not been completed. Above-ground fruiting structures (sporocarps) are short-lived, seasonal in occurrence, and annually variable making surveys difficult (USDA and USDI 2004). According to BLM Information Bulletin No. OR-2004-145, it is expected that field units would not conduct field surveys for these species, due to survey impracticality. Protection of known sites along with ongoing large-scale inventory work would provide the measures and means to meet agency policy.

The 2004 *FSEIS to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* analyzed whether habitat and known sites are sufficient to support stable populations of these species in the Northwest Forest Plan area and whether insufficiencies were due to federal actions. Outcomes not due to federal actions could include such factors as: (1) limited potential habitat and few populations on federally managed lands; (2) potential for stochastic events; (3) low number of individuals; (4) limited distribution; and, (5) narrow ecological amplitude (USDA/USDI 2004).

No special status fungi species have been found in the 5th field watershed. Five species, though, would have a reasonable likelihood to occur in the project area. *Rhizopogon exiguous*, *R. chamaleotinus* and *R. ellipsosporus* habitat was determined to not be sufficient to support stable populations in the Northwest Forest Plan area and this insufficiency was not due to land management actions. *Rhizopogon exiguous* and *R. chamaleotinus* were found in Josephine County. *R. exiguous* was found in the lower Applegate 5th field watershed. It has a very broad habitat description; it is associated with the roots of Douglas-fir and western hemlock. It is endemic to Oregon and Washington and has known sites also in Lane and Benton counties. *R. chamaleotinus* was found in the Taylor creek 5th field watershed. Its habitat is also broad; it is found in association with Douglas-fir and scattered sugar pine

roots. Besides its one known site in the range of the northern spotted owl, it is also known from Idaho (Castellano et al 2003). *R. ellipso sporus* was found in the Lower Applegate River 5th field and in the West Fork Illinois 5th field watershed. It is also broadly associated with the roots of Douglas-fir and sugar pine. It has been found in both Josephine and Jackson counties.

Phaeocollybia olivacea was determined to have habitat sufficient to support stable populations in the Northwest Forest Plan area. These species would stabilize in a pattern similar to or different from their reference distribution because a substantial number of known sites are located in reserves or managed under the agencies' Special Status Species Programs (USDA, USDI 2004 p. 152). Three populations of *P. olivacea* have been found in the Taylor Creek 5th field watershed and the Williams 5th field watershed. This species is endemic to western United States from the central Oregon coast south to Santa Cruz County. It has a very broad habitat description essentially stating that it can be found in oak family or pine family mixed forests in coastal lowlands (Castellano et al 2003).

One of the five fungi species (*Phaeocollybia californica*), was determined by the 2004 FSEIS to have insufficient habitat due to land management activities. Known sites of *P. californica* are not substantially protected by reserves and are susceptible to adverse impacts from soil disturbance and/or a significant loss of host species. Although matrix Standards and Guidelines of the Northwest Forest Plan provide for minimizing soil and litter disturbance, there is lack of knowledge about how much disturbance can be tolerated by these species. Loss of even a few known sites (although none are known in the project area) could adversely impact this species' persistence in the Northwest Forest Plan area (USDA, USDI 2004 p. 154).

One population of *P. californica* is historically known from the East Fork Illinois 5th field watershed. The species is broadly associated with the roots of Pacific silver fir, sitka spruce, Douglas-fir and western hemlock. It is endemic to Washington and Oregon and as mentioned above has 30 known sites ranging from the Olympic peninsula to southwestern Oregon.

Given the broad habitat and the lack of surveys completed for any of these five species, it can be assumed that more sites do exist. It is unknown how rare these species really are, but it is known they are associated with the common tree species discussed above. As mentioned, the 2004 *FSEIS to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* addressed incomplete or unavailable information regarding these species (USDA/USDI 2004 p. 108-109). It disclosed the unknown strength of the association between these species and late successional conditions as well as unknown information regarding connectivity, habitat needs and range. It stated that any discussion of risk based on rarity and likelihood of disturbance must recognize that, for many species, only a small percentage of potential habitat has been surveyed.

Alternative 1: No Action

Special status species would continue to be at risk for wildfire impacts and trampling due to user-created trails. In the event of a wildfire, areas with high fuel hazards and dense understory could burn with intensity sufficient to eliminate these species from the site for at least the short term. This could threaten *Cypripedium* populations and habitat which have been shown not to survive such fires (Management Recommendations). Continued creation of unofficial trails would cause trampling of current populations and compaction of potential habitat.

The current rate of introduction and spread of noxious and non-native species would continue due to user-created trails. Also, most of the noxious weeds that are of the greatest concern are shade

intolerant species. Therefore, in the event of wildfire, weed invasion and spread would likely increase, especially near trails and where roads and developed areas are adjacent to the project area.

Alternative 2: Proposed Action

The project design feature to use a no-ground disturbance buffer would eliminate direct effects to special status species populations during fuel reduction thinning. Since the proposed action would only treat trees < 7" DBH, the canopy cover comprised of larger trees would remain relatively intact. This reduces the risk of indirect effects to potential fungi habitat, mycorrhizal connections for special status orchid species, or moist microsites. Management methods that retain living trees and shrubs provide host trees and substrates to maintain mycorrhizal networks (Amaranthus and Perry 1994). If spring burning is implemented, PDFs requiring cool burns would protect special status orchids.

Hand pile burning could affect unknown populations or potential fungi habitat. The impacts of prescribed burning for removal of slash and site preparation depends on fire intensity. High intensity burns that get into mineral soils may eliminate mycorrhizal fungi and create habitat that is colonized by non-mycorrhizal plant species including weeds. A recent study by Smith et al (2004) examined short-term effects of seasonal prescribed burning on ectomycorrhizal fungi. Results showed that fall under burning in dry ponderosa pine stands of eastern Oregon (which have climatic similarities to the dry mixed evergreen stands in the project area) significantly reduced duff depth, live root biomass, and ectomycorrhizae species richness compared to spring underburning, for at least two years. Also, the probability of residual tree mortality was greater for fall burning. The data suggests that spring burning should be favored over fall burning if maintaining ectomycorrhizal species diversity is an objective.

High intensity burns, such as slash pile burning, that enter mineral soils would burn the organic soil layer and reduce available nutrients, soil moisture, fungal biomass/diversity. It would also alter fungal species composition, degrade soil physical structure and increase non-mycorrhizal species' (many that are weedy) ability to become established (Amaranthus and Perry 1994, Korb et al 2004). While hand piles may create these effects, their footprint across the landscape is small. An average of 70 hand piles per acre affects only 6% of that acre. Therefore, of the roughly 300 acres treated out of the 422 acre project area (given untreated areas outlined in PDFs) only 18 acres would experience high intensity burning from hand piles.

While there is a reasonable likelihood of occurrence for five fungal species in the project area, the small percentage of area hand piled and the use of cool underburning should reduce the risk to these species and allow any affected unknown populations to recover.

Reduced fire hazard would reduce the risk of large scale weed invasion and spread.

The trailhead expansion and trail work could impact unknown fungi populations or potential habitat. However, given the small footprint of the disturbance, the risk to the five BSS fungal species is very low. Trail decommissioning should benefit unknown populations or potential habitat due to regeneration of the organic layer and mycorrhizal connections.

Cumulative Effects

Past actions may have affected fungi habitat directly through damage to sporocarps or underground portions of populations or indirectly through changes in habitat as described in detail above. Whether

these changes have affected fungi habitat substantially is unknown due to the lack of information regarding the five fungi species discussed above.

Information is not available regarding the frequency of occurrence for BSS fungi; it is only available from surveys done at the landscape scale, not the project level. Also information available on the habitat for such species is very broad and does not provide the specificity needed to analyze project level or cumulative actions. The only way to obtain more detailed information at the project level would be through surveys which have been determined to be impractical by the Oregon/Washington State Office (BLM IB No. OR-2004-145). It is unlikely that other avenues for conducting pre-project evaluations, such as habitat examinations, habitat evaluation, evaluation of species-habitat associations and presence of suitable or potential habitat, and the review of existing survey records, inventories and spatial data would yield sufficient information to make an adequate evaluation at the field level (BLM IB No. OR-2004-145).

Information that is available, though, states that fire has played an important role in influencing plant communities of southwestern Oregon. The mixed evergreen forests typically found in the project area have been created and perpetuated in the past by fire. This regime has been disrupted by fire suppression (Franklin and Dyrness 1988, Atzet and Wheeler 1982). If species have in such forests evolved under a more natural fire cycle, then the assumption can be made that these species would typically persist under more open conditions. If dense stands and hazardous fuel loadings are reduced while maintaining a mosaic of fungi habitat components across the landscape, then risk of damage due to high intensity wildland fire would be reduced for fungi and other special status plant species.

In summary, based upon known information about these fungi species, it is anticipated that the proposed actions are unlikely to have substantial effects. Additionally, the actions proposed under the Cathedral Hill project would not incrementally add to reduction in fungi habitat within the watershed due to the size of the project in relation to the size of the watershed and the nominal degree of impact.

3.3 Wildlife

Affected Environment

There are six different plant series in the Grants Pass watershed. According to the Grants Pass Watershed Analysis, the most prevalent plant series in the Cathedral Hills area is Douglas-fir. The primary plant association in the area is Douglas-fir/dry shrub with occurrences of the white oak plant series. Habitat is diverse and includes a mosaic of white oak woodland and hardwood stands dominated by madrone and a few large ponderosa pines and Douglas-firs. Trees in the project area include ponderosa pine, Douglas-fir, madrone, white oak and incense cedar. Chaparral habitat, consisting primarily of manzanita and wedge-leaf ceanothus, is found throughout the project area, including dense thickets of decadent manzanita taller than 4'. Mixed conifer stands are distributed throughout the project area. These patches are small, but provide connectivity for many wildlife species, especially in riparian areas.

Threatened and Endangered (T&E) Species. The project area is not considered suitable nesting, roosting, or foraging habitat for spotted owls (*Strix occidentalis caurina*). There are approximately 414 acres of dispersal habitat in the project area; approximately 11 acres meet no known requirements for spotted owls. The nearest known spotted owl site is more than 4 miles away. There is no suitable nesting bald eagle (*Haliaeetus leucocephalus*) habitat in the project area and no known sites in or adjacent to the project area.

BLM Sensitive Species. The project area provides potential habitat for a number of BLM sensitive species including birds, reptiles, amphibians and mammals. The project area provides potential roosting habitat for sensitive bat species in the form of green trees and snags.

Neotropical Migratory Land Birds. The project area provides habitat for migratory birds on the USFWS Birds of Conservation Concern list, such as Lewis' woodpecker, rufous hummingbirds and flammulated owls. The project area provides suitable nesting habitat for Lewis' woodpecker and the flammulated owl; however, based on the lack of mature conifers and large snags, this habitat is marginal. The project area provides suitable nesting habitat for the rufous hummingbird.

Other Wildlife. There is no RMP-designated deer winter range in the project area. Deer are likely in the project area year round. However, forage is declining in areas of dense and decadent manzanita.

Unique Habitats. The project area contains approximately 150 acres of oak woodland. This habitat type is declining due to lack of disturbance and encroaching brush and conifers and occurs mostly in the southwest and northeastern portions of the project area.

Alternative 1: No Action

Shrubs and small trees would continue to encroach upon mature hardwood and conifer forests. Competition for resources would continue to increase, causing stress to the larger, dominant trees. Big game forage would decline and become more decadent. The increased density of decadent wedge leaf would limit travel for wildlife species. Encroachment by brush and small conifers upon the oak woodland would continue. Fuel hazard would continue to build, putting suitable special status species habitat at risk if a large stand replacing fire were to occur. Additional disturbance to wildlife and habitats in the project area would occur as the public continues to use and develop unmanaged trails.

Alternative 2: Proposed Action

The primary impacts associated with fuel hazardous reduction would be changes in the horizontal and vertical structure of shrubs and small trees resulting in more open canopies and reduced hiding cover. As a result, some loss of nesting habitat for neotropical birds would be expected. However, habitat islands would be retained in a mosaic pattern. Untreated woodland and brush islands would provide escape, hiding, thermal, foraging and nesting cover for a wide range of animals (e.g., big game and neotropical birds). Large diameter snags would maintain nesting, roosting and foraging habitat for primary and secondary cavity excavators and species dependent on cavity excavators such as the flammulated owl. Snags would maintain bat habitat. Felled trees and snags would become habitat for reptiles and amphibians and would help replace coarse woody material incidentally burned during under burning.

Species that benefit from greater tree and shrub densities may be impacted by fuels treatments. However, untreated habitat patches would minimize that impact. Additionally, fuels treatments would reduce the risk of stand replacing fire and greater loss of dense shrub and tree habitat. Other wildlife species would benefit in the long term as vegetation density is reduced and habitat diversity is increased. Big game forage would improve due to greater nutrient content of herbaceous species and shrubs (sprouts and new top growth).

Ground disturbance would occur due to trail and trailhead activities. However, compared to the total extent of untreated areas, the impacts to wildlife from these activities would be minimal. Some of the

areas proposed for recreation work have already been disturbed and are not currently suitable habitat. The availability of adjacent habitat would help further minimize potential impacts. Additionally, untreated islands would be left in the general vicinity of the parking lot areas. Improved trail conditions would likely increase use by the public which could increase wildlife disturbance in the immediate vicinity of the trail. However, a greater, beneficial impact would be reduced user-created trails which would reduce impacts to habitat between trails.

Disturbance due to project activities would be of short duration (approximately six weeks) and would occur during the fall, winter or spring. This disturbance could cause temporary displacement and modified wildlife behavior during project implementation.

The hazardous fuels reduction of this project would have long term beneficial effects on oak woodland habitat and associated species. Stand thinning would promote a more complex and diverse understory of native grasses, forbs, and shrubs, which would support a diversity of wildlife species.

No adverse effects to T&E species are expected since no suitable nesting habitat would be removed. Dispersal habitat would remain in the project area. Due to the diversity of habitats that would exist following treatments, no adverse effects to special status species are expected at the watershed level. The proposed action would not lead to the need to list any special status species as T&E.

Cumulative Effects

There are approximately 460 acres of BLM land in the vicinity that have received or are planned for similar fuel hazard reduction treatments. An additional 340 acres are proposed as possible out year fuels reduction projects. Long term cumulative effects to wildlife species dependent on these chaparral and oak woodland habitats and intermixed patches of conifer stands would be beneficial. These habitats would be restored or improved which would increase the amount of habitat in the watershed. Species dependent on dense shrub and conifer habitat would be negatively affected by fuel treatments. However, the risk of stand replacing fire, and greater habitat loss, would be reduced in the watershed. The dense habitat is largely a result of fire suppression. The beneficial effects of the fuel treatments would restore open and patchy conditions and would outweigh the loss of some dense habitat in the watershed. Fuel hazard reduction on private lands are also likely and may entail heavier treatments with less emphasis on leaving untreated patches. Treatments on private lands and the creation of subdivisions would further fragment and isolate these chaparral and oak woodland habitats and intermixed conifer patches.

3.4 Fisheries

Affected Environment

All streams within the project area are intermittent or ephemeral and non-fish bearing. The majority of these streams flow into Allen Creek, which flows into the Rogue River. Allen Creek contains cutthroat trout and steelhead at approximate distances of 0.4 miles and 1.5 miles respectively from the project area. Project proximity to fish distribution in Allen Creek ranges from a low of 0.4 miles to greater than 2.0 miles for streams draining catchments in the northern and southern portions of the project area. However, all but one stream has greater than 1.0 miles to flow outside of the project area before fish distribution is encountered. Allen Creek is not on the 2002 DEQ 303(d) list.

Owl Creek, a tributary to the Rogue River, receives runoff from the eastern portion of the project area. Owl Creek contains cutthroat trout, steelhead and coho salmon. Cutthroat trout and steelhead are

approximately 1.3 miles downstream from the project area, and coho salmon, approximately 2.8 miles. Owl Creek is not on the 2002 DEQ 303(d) list.

Alternative 1: No Action

Trails in riparian areas, stream channels, or those in need of maintenance can deliver sediment to stream systems. Therefore, degradation of riparian areas and water catchments due to poor trail conditions would contribute sediment and further degrade fish habitat.

Alternative 2: Proposed Action

Trail work would result in short term, localized pulses of sediment. Due to the intermittent/ephemeral nature of the drainages in the project area, and distance from fish bearing streams, there would likely be no effect to fish habitat or behavior. Actions such as trail relocation and decommissioning and installing culverts, bridges, or rock crossings would improve long term fish habitat by reducing sediment. Additionally, PDFs such as scarifying the topsoil of decommissioned trails, seeding with native vegetation and mulching would further minimize any adverse effects.

The parking lot expansion at the Skycrest Trailhead would be 10' from the riparian area of an intermittent stream. Although some riparian vegetation may be removed, temperature in the intermittent stream should not change. During the summer the stream channel would be dry; therefore downstream temperatures would not increase. Additionally, sediment from the parking lot should not reach fish bearing areas (approximately 2.5 miles downstream).

Cumulative Effects: Because there are no direct adverse effects to fisheries, there are no cumulative effects.

3.5 Fire and Fuels

Affected Environment

Throughout the project area, vegetation is uncharacteristically dense due in part to fire exclusion. Approximately 30% of the project area contains brush fields at least 6' high (fuel model 4). The rest of the project area is primarily a conifer-hardwood mix (fuel model 9 or fuel model 10). High fuel densities could contribute to active crown fires and significant tree mortality, both of which can reduce public safety and increase property damage in the event of a wildfire during high to extreme fire weather conditions. The project area is in fire regime III(a) (mixed severity conifer stand with 35-50 year fire intervals). The fire condition class is 3, which means fire regimes have been significantly altered from their historical range.

The fire and fuels situation in and around the Cathedral Hills area is becoming more critical each year. As the forest continues to grow and woody debris and down fuel increase, the likelihood of a major high intensity fire is greater. The situation is made worse by the fact that residential development has escalated. Currently, most of the adjacent properties around the park are developed. These developments are generally homes built on ridge tops or on sideslopes (Cathedral Hills Trails Management Plan 2003).

Today, Cathedral Hills, along with other portions of the valley, include overstories that are Douglas-fir dominated with some ponderosa pine, incense cedar and sugar pine. Portions of the overstory canopy (in some cases 15-40%) are dead or dying from insect attack by the Douglas-fir beetle (*Dendroctonus pseudotsugae*). Some sugar pine is dead or dying from the mountain pine beetle (*Dendroctonus*

ponderosa) (Draft Cathedral Hills Trails Management Plan 2003). These snag patches can create unique fire behavior dangers during wildfires which have not been accurately classified.

Alternative 1: No Action

Fire hazard would continue to increase as fuels increase. Therefore, the risk of intense, high severity, stand replacing fire would also increase. Increased difficulty of suppression would likely result in loss of or damage to resources and property.

Alternative 2: Proposed Action

Fuel reduction treatments would alter the live and dead fuel profile on approximately 70% of the 422 acre project area. Crown bulk density, fuel continuity, and crown fire risk would be reduced. In the conifer-hardwood areas, crown base height (the vertical distance from the ground to burnable vegetation) would increase, requiring greater flame lengths to ignite remaining vegetation. This fuel profile would slow wildfire spread and enable fire suppression personnel to more safely and efficiently control fires. Untreated islands or buffers could burn more severely than treated areas. However, fire behavior would still be reduced due to modified fuel structure throughout the project area.

Following fuel hazard reduction treatments, fire hazard would likely rebuild more quickly in shrub lands, due to vegetation resprouting, than in forested areas. Within five years following treatment, fire hazard in shrub lands could begin to rebuild. In forested areas, fire hazard could rebuild within 10 years. However, proposed fuel maintenance treatments would retard this fuel buildup.

Cumulative Effects: Because there are no direct adverse effects to fuel hazard, there are no cumulative effects.

3.6 Recreation

Affected Environment

Cathedral Hills is in the urban growth boundary of Grants Pass. The project area is surrounded by private land and is receiving increasing pressure for recreational use by adjacent landowners and the neighboring community.

There are 12 miles of trails in Cathedral Hills including designated and non-designated trails. The non-designated trails have been built at random by users. Many of the trails are poorly located, steep, eroding or lead to private land.

The trailheads are unsafe and do not provide adequate designated parking. The Espey Road Trailhead does not have designated parking spaces; therefore, vehicles are parked randomly, making trailer parking difficult. The Skycrest Trailhead currently provides minimal turnout parking and has safety issues due to recreationists walking along the road to access the trail. At the Walker Road Trailhead, there is one entrance/exit and only room for one to two (small) vehicles. When exiting, vehicles have to either back out of the parking area on to the road, or back into the vegetation to turn around.

Alternative 1: No Action

In the no action alternative, trails would continue to erode. Existing trails that access private land would not be rerouted thus allowing trespass onto private lands to continue. With no signing, recreationists would continue to get lost along the trail systems. At trailheads, there would not be adequate parking spaces, and no designated spaces for horse trailers. Safety would be a concern, with

random parking patterns at some trailheads, and not enough parking at other trailheads, forcing users to park on the street. Without toilets and infrastructure at trailheads, health and safety issues, such as littering and “toilet paper gardens” would continue. Conflicts between types of users would continue and more unauthorized user-created trails would be built as a result of conflicts and lack of education. Without interpretation and increased management of the area, off-highway vehicles would continue to use the trail systems. Increased use of the area would increase fire risk and there would be higher potential for wildfire without the fuels reduction work.

Alternative 2: Proposed Action

In the short term, hand piles from fuels reduction work may be visible from trails. By opening up the understory, there would be a lower risk of fire in Cathedral Hills and adjoining lands. Opening up the understory may invite people to travel off designated trails, and create new trails. However, leaving a buffer along existing trails of more lightly treated vegetation would reduce the chances of travel off designated trails. Leaving large manzanita along the trail would provide a visually pleasing canopy and also would block users from traveling off trail.

Trailhead improvement would decrease user conflicts and provide safer ingress and egress by providing adequate, designated parking areas for both vehicles and trailers. At the Skycrest Trailhead, users would be able to park in the parking area and not along the road, thereby improving safety. The Walker Road Trailhead parking area and pull through design would provide for safe ingress and egress.

Trail restoration, decommissioning and rerouting would reduce erosion and sedimentation along poorly designed or located trails. Trails with lower grades would also reduce erosion and provide for some easier trails. Trails which are closed and decommissioned may continue to be used if they aren’t effectively blocked off, or if the vegetation which is blocking the trail is removed. In the short term, new trail construction would increase bare soil along the trail tread and cut banks. Over the long term, the new trails and reroutes would be covered with duff and fit in with the landscape. Providing for adequately built trails for all user types would reduce user-created non-designated trails.

Posting property boundaries throughout the area would reduce conflicts with neighbors, trespassing and unauthorized trail construction.

Providing an area specifically for mountain bicycles would reduce user conflicts and better meet the needs of mountain bikers for narrower, steeper trails.

Cumulative Effects

With the real estate development of Grants Pass and the surrounding communities, development and restoration of a specific area for recreational use would provide a better managed recreation opportunity for non-motorized use and would reduce development and use of unauthorized user-created trails on nearby public and private lands. The trail system would provide a semi-developed recreation experience which could be maintained and patrolled. Cathedral Hills could also provide the impetus to continue to develop additional low elevation, easily accessible trail systems on public lands in the Grants Pass area which connect throughout the rural interface.

3.7 Cultural Resources

Affected Environment

A cultural resource survey of the project area was completed on June 8, 2005 and located 7 historic sites (habitation flats, dumps, and an old Josephine county dynamite shack (foundation only). One previous cultural resource survey of 5.5 acres was completed in T36S, R5W, section 31 and T37S, R5W, section 5 in 2004 for a trail reroute and construction. No cultural resources were located at that time. No pre-historic sites were found in either survey.

Alternative 1: No Action

Fuels build-up would continue to increase and could result in a catastrophic fire which could threaten or destroy cultural resources. Vegetation would continue to encroach on cultural resources and could result in the damage or destruction of those resources.

Alternative 2: Proposed Action

Known cultural resource sites would be buffered from treatment and therefore would not be impacted by project activities. If the new trail construction increases unauthorized OHV use (which is already occurring along existing trails), cultural resources near trails could be damaged. However, this potential damage should be inconsequential due to signs designating trails as closed to OHVs and monitoring/enforcing compliance.

3.8 Visual Resources

Affected Environment

The area is in VRM Class III. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape (BLM Manual 8431).

The project area is vegetated with a heavy understory. Users can generally only see a short distance from the trails, with the exception of the trails along the ridgeline, where views are longer, and generally of the surrounding private lands.

Alternatives 1 and 2

In both the no action and the proposed action alternatives, VRM objectives would be met. In the no action alternative, conditions would remain the same.

In the proposed action, understory openings would increase and eye level greens would decrease slightly. The casual observer may notice some clearing and increased light reaching the ground; however, with a lighter treatment along the trails, the clearing would be less apparent. In the long term, without fuels treatment, the chance of a large, stand replacing fire would be greater and those changes would be very apparent to the casual observer.

Cumulative Effects: Because there are no direct adverse effects to recreation resources expected, there are no cumulative effects.

4.0 Agencies and Persons Consulted

4.1 Public Involvement

During scoping, 97 letters describing the proposal were sent to interested individuals, local and state governments, organizations and neighboring land owners. In addition, 100 letters were sent to land owners in the greater Cathedral Hills area west and northwest of the project to invite participation in a collaborative fuels reduction effort on private land. Local partners were coordinated through the Josephine County Integrated Fire Plan and the five sub-committees associated with the Fire Plan. Scoping comments were received by two organizations and five individuals that expressed general support for fuel hazard reduction projects of this type. Adjacent landowners were contacted to discuss the project and a presentation was given to several homeowners in the Curtis Drive neighborhood. Extensive discussions about the Resource Area's prescribed burning program have been held with Josephine County, Rural Metro Fire Department, and Oregon State Department of Forestry during development of the Josephine County Fire Plan, which was completed in November, 2004. The BLM has been partnering with Josephine County Parks at Cathedral Hills on development of the trail restoration and relocation project through meetings and field visits.

4.2 Availability of Document and Comment Procedures

Copies of the EA will be available for public review in the BLM's Medford and Grants Pass offices. A formal 15-day public comment period will be held following an announcement in the Grants Pass Daily Courier. Written comments should be addressed to Abbie Jossie, Field Manager, Grants Pass Resource Area, at 3040 Biddle Road, Medford, OR 97504. E-mailed comments may be sent to or110mb@or.blm.gov.

Appendix A. Maps

Map 1. Vicinity Map

Map 2. Treatment Map

Appendix B. Alternatives Considered but Eliminated from Further Analysis

The following alternative was eliminated from further analysis due to conflicts with recreation objectives, timing issues, visitor safety issues, and the possibility of yarding corridors turning into new trails.

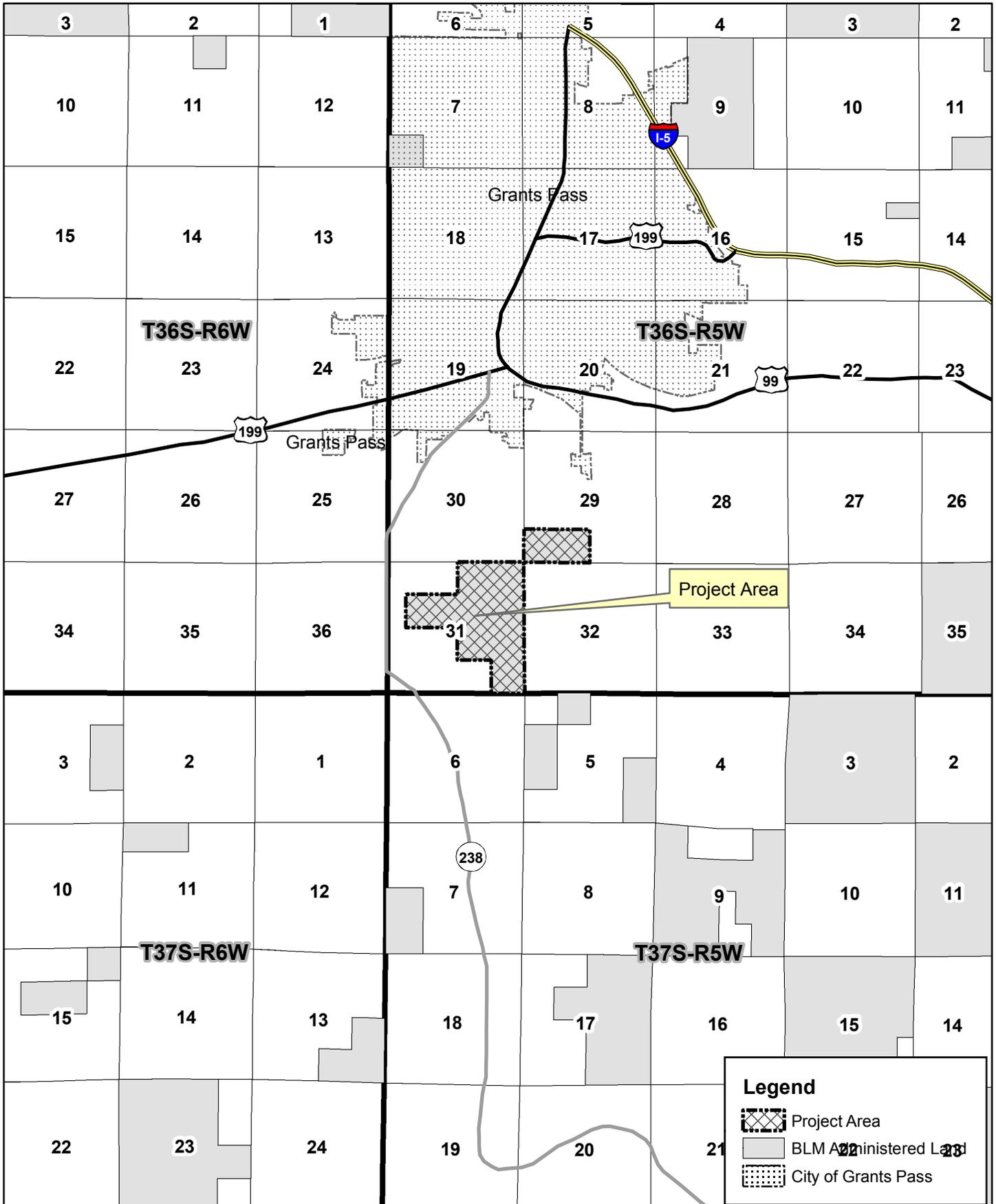
Special Forest Products Alternative

Proposed Action: Some down material from fuels reduction and trail work may be removed from the site in the form of poles, firewood, or other usable products.

Stipulations for use of extracted material which would otherwise be wasted include:

- Gathering and yarding material would be limited to horses or motorcycle type ATVs using integral arches.
- Gathering would be limited to areas with slopes less than 20% along the Skycrest Trail and the Golf Course Trail
- Horses and ATV's would remain on established trails.
- Material would be dragged or yarded to trails and then transported to trailheads.
- Bio-mass would be removed within 2 days from trailheads and located so that recreation use would still be possible.

Map 1 - Cathedral Hills Fuels Reduction and Recreation Management Vicinity Map



Legend

- Project Area
- BLM Administered Land
- City of Grants Pass

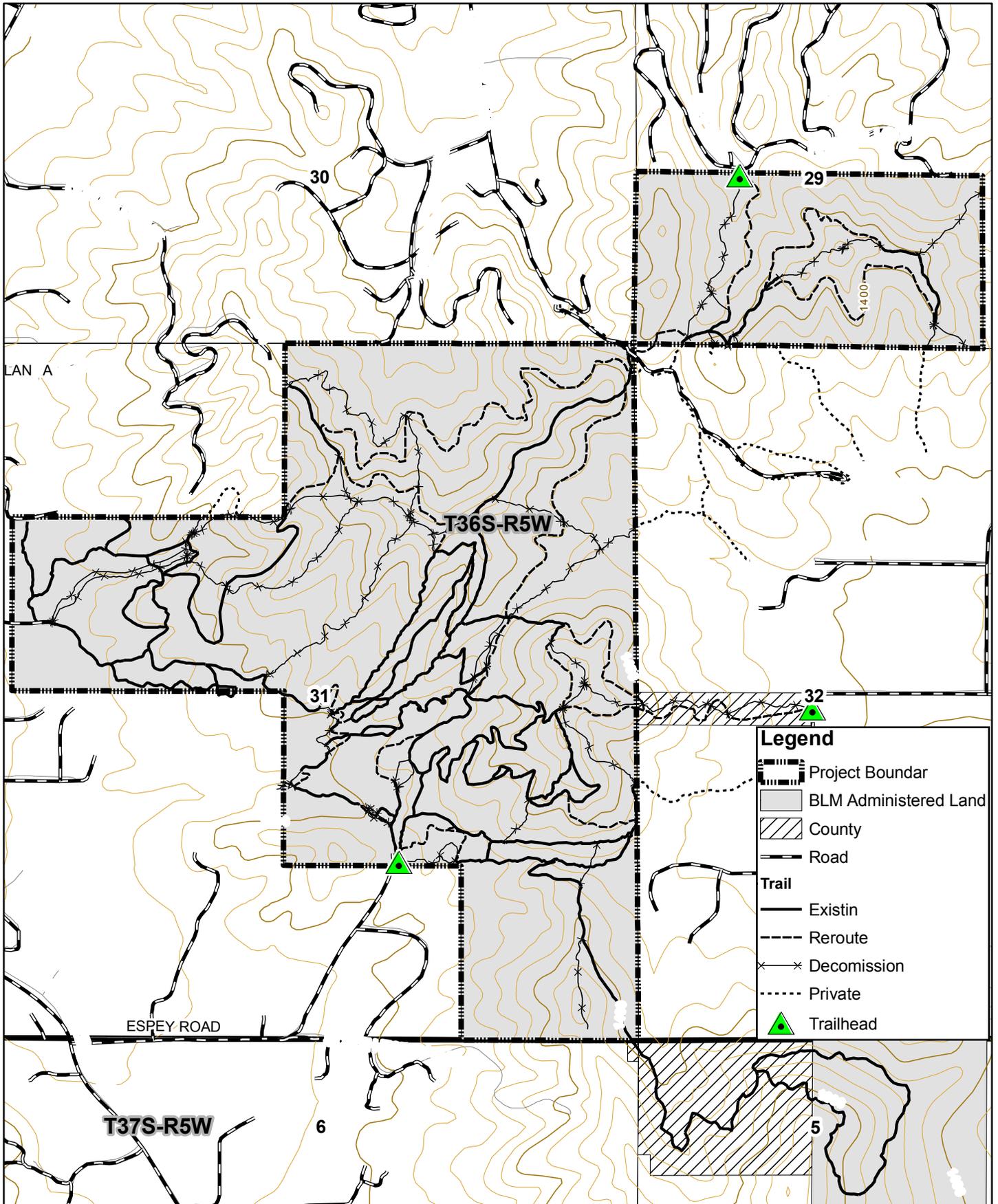
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1 inch = 1 mile



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Map 2 - Cathedral Hills Fuels Reduction and Recreation Management Treatment Map



Legend

- Project Boundary
- BLM Administered Land
- County
- Road
- Trail**
 - Existing
 - Reroute
 - Decommission
 - Private
 - Trailhead



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