



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT OFFICE  
3040 Biddle Road  
Medford, Oregon 97504  
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IN REPLY REFER TO:

1792 (116)  
Tyler Ck. Fuels Project EA  
A6508(WHY:jl)

JUL 09 2001

Dear Interested Public:

The *Environmental Assessment* (EA) for the Tyler Creek Fuels Project is being advertised in the Medford Mail Tribune for a 30 day public review period. The proposed action would be a fire hazard reduction project on a 16 acre site near Tyler Creek. The site would serve as a demonstration site for local residents to show that fuels reduction treatments can be both aesthetically pleasing and effective.

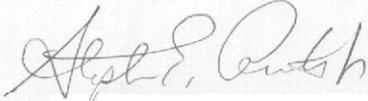
The primary purpose of a public review is to provide the public with an opportunity to comment on the BLM's determination that there are no significant impacts associated with the proposed action and, therefore, an environmental impact statement is not necessary.

This EA is published on the Medford District web site, [www.or.blm.gov/Medford/](http://www.or.blm.gov/Medford/), under "Planning Documents."

We welcome your comments on the content of the EA. We are particularly interested in comments that address one or more of the following: (1) new information that would affect the analysis, (2) possible improvements in the analysis; and (3) suggestions for improving or clarifying the proposed management direction. Specific comments are the most useful. Comments, including names and addresses, will be available for public review. Individual respondents may request confidentiality. If you wish to withhold your name and/or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

All comments should be made in writing and mailed to Bill Yocum, Ashland Resource Area, 3040 Biddle Road, Medford, OR 97504. Any questions should be directed to Bill Yocum or Angie Morris at (541)618-2384.

Sincerely,



Richard J. Drehobl  
Field Manager  
Ashland Resource Area

Enclosure (as stated)

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

ENVIRONMENTAL ASSESSMENT

FOR

Tyler Creek Fuels Project  
OR-110-01-021

Summer 2001

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
ASHLAND RESOURCE AREA

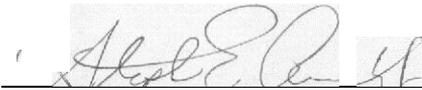
EA COVER SHEET

**Project Name/Number:** Tyler Creek Fuels Project, OR-1 10-01-021

**Location:** Ashland Resource Area

List of Preparers	Title	Responsibility
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Bill Yocum	Planning and Environmental Coordinator	NEPA
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This environmental assessment (EA) was prepared utilizing a systematic interdisciplinary approach integrating the natural and social sciences, and the environmental design arts with planning.

  
 Richard J. Drehobl, Ashland Field Manager

07-09-01  
Date

*for*

TYLER CREEK FUELS PROJECT EA

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## **CHAPTER 1: NEED FOR THE PROPOSAL AND PROJECT ALTERNATIVES**

### **A. NEED FOR THE PROPOSAL**

In 1998 Friends of the Greensprings (FOG) began planning to write an owner's manual for residents of the Tyler Creek Watershed. The manual will describe the effects residents have on fire, water, and wildlife. In addition, FOG members have been performing fire hazard reduction work adjacent to BLM land in T40S, R3E, Section 6. FOG requested that BLM extend this existing fire hazard reduction project to BLM land to serve as a demonstration site for local residents. A goal of the project is to show residents that fuels reduction treatments can be both aesthetically pleasing and effective.

### **B. CONFORMANCE WITH EXISTING LAND USE PLANS**

The proposed activities are in conformance with and tiered to the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (SEIS) (USDI, USDA 2001) and the *Medford District Record of Decision and Resource Management Plan* (RMP) (USDI 1995b). These Resource Management Plans incorporate the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (NWFP) (USDA and USDI 1994). These documents are available at the Medford BLM office and the Medford BLM web site at <<http://www.or.blm.gov/Medford/>>.

### **C. RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS**

The proposed action and alternatives are in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act) and the Federal Land Policy and Management Act of 1976 (FLPMA).

### **D. DECISIONS TO BE MADE ON THIS ANALYSIS**

This environmental assessment (EA) is being prepared to determine if the proposed action would have a significant effect on the human environment thus requiring the preparation of an environmental impact statement (EIS) as prescribed in the National Environmental Policy Act of 1969. The EA is also being used to inform interested parties of the anticipated impacts and to provide them with an opportunity to comment on the various alternatives.

The Ashland Resource Area Field Manager must decide:

- Whether or not the impacts of the proposed action are significant to the human environment beyond those impacts addressed in previous NEPA documents (SEIS, RMP). If the impacts are determined to be insignificant, then a Finding of No Significant Impact (FONSI) can be issued and a decision implemented. If any impacts are determined to be significant to the human environment, then an EIS must be prepared before the Manager makes a decision.

- Whether to implement the proposed action alternative or to defer to the no action alternative.

#### **E. ISSUES OF CONCERN**

The following issues were identified throughout the scoping process. Not every issue is analyzed in detail by this EA. All of the issues were reviewed by the Interdisciplinary Team (ID Team).

- Landscape Fire Hazard - With effective fire suppression of low intensity fire, the amount of vegetation (fuel loading) and consequent fire hazard continues to increase.
- Threatened & Endangered Plant Species - *Fritillaria gentneri* (Gentner's fritillary) is a federally listed endangered species. Known sites would be protected from ground disturbing activities.
- Invasive, Nonnative Species - Activity and disturbance increase the spread of nonnative species, such as star thistle in open environments of the project area.

## CHAPTER 2 ALTERNATIVES

### A. INTRODUCTION

This chapter describes the proposed action alternative and the no action alternative. This chapter also outlines specific project mitigation features that are an essential part of the project design.

The Ashland Resource Area has developed a proposed action designed with the management objectives outlined in the Upper Bear Creek Watershed Analysis (pages 124-145) and in accordance with the best management practices as outlined in the Medford District RMP (pages 149-177).

### B. PROPOSED ACTION ALTERNATIVE

The proposed treatment for the 16 acre Tyler Creek project (map attached) would include understory thinning of conifer and hardwood vegetation followed by handpiling and pile burning to reduce fire hazard within the stand. Manual thinning would occur only to noncommercial conifer species less than 8 inches DBH (diameter breast height) and madrone species less than 10 inches DBH. Within the unit there are riparian reserves. Treatment would occur throughout the entire unit except within 25 feet on either side of streams or wetlands designated as no-cut buffers. These 25 feet no-cut buffers would exist within the riparian reserve areas. Manual treatments would most likely occur anytime throughout the year, while the handpile burning would most likely occur between the months of November and April.

Within the 16 acre unit there would also be a light underburn treatment applied to an area approximately 2 acres in size. This area is located in the Northeast corner of the unit and is part of a study site designed to measure the effects of fire on *cypripedium fasciculatum*. Typically, underburn treatments are implemented between December and May. However, if an appropriate burn window can not be identified during the spring months due to the growth cycle of *cypripedium fasciculatum*, the underburn may be implemented during the fall.

Future underburns may also be implemented to help maintain the stand in its natural condition and prevent a future build-up of fuels. These underburns would be light treatments and help maintain the reduced fire hazard following the initial slashing and pile burning treatment. Typically, maintenance underburns would occur 2-7 years following the initial treatments but would be driven by the condition of the stand and regrowth of slashed vegetation.

### C. PROJECT DESIGN FEATURES

Project Design Features are included for the purpose of mitigating or reducing anticipated adverse environmental impacts which might stem from the implementation of the proposed action alternative.

- Prescribed burning operations would follow all requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality Air Quality and Visibility Protection Program. Burning operations would be postponed if Medford is under a "yellow" or

"red" wood burning advisory.

- Reducing the potential level of smoke emissions from proposed burn sites would include mop-up to be completed as soon as practical after the fire, burning with lower fuel moisture in the smaller fuels to facilitate their quick and complete combustion, burning with higher fuel moisture in the larger fuels to minimize consumption and burn out time of those fuels, and covering hand piles to permit burning during the rainy season where there is a stronger possibility of atmospheric mixing and/or scrubbing.

- To minimize loss in soil productivity and surface erosion, underburning would be planned and scheduled to result in low intensity burns, whenever possible, to reduce the loss of organic matter, nutrients, and subsequent site productivity. In order to encourage diversity and plant regeneration, fire may be used to expose mineral soils in isolated pockets. Burn plan targets would be set to minimize effects on soil productivity.

- To preclude the establishment of invasive, nonnative plant species, areas of newly disturbed mineral soil would be sown with native plant seed.

- To prevent disturbance to any great gray owls that might be nesting in the proposed project area, no mechanical activity ( chainsaws, chippers, slashbuster etc.) or prescribed burning operations would occur in the proposed project area from February 1 to June 30. This restriction could be lifted if the proposed project area is surveyed for great gray owls using the most recent version of the great gray owl survey protocol and no nests are found.

- No handpiles would be closer than 25 feet to the edge of any stream.

#### **D. NO ACTION ALTERNATIVE**

Under the “no action” alternative, the fire hazard reduction demonstration project would not include an extension onto BLM lands.

## CHAPTER 3 AFFECTED ENVIRONMENT

### INTRODUCTION

The affected environment describes the present condition within the proposed project area that would be affected by the alternatives. The information in this chapter would serve as a general baseline for determining the effects of the alternatives. No attempt has been made to describe every detail of every resource within the proposed project area. Only enough detail has been given to determine if any of the alternatives would cause significant impacts to the environment.

### A. FUELS

Climate and topography combine to create the type of fire regime found in the Tyler Creek project area. Fire regime is a broad term and is described as the frequency, severity and extent of fires occurring in an area (Agee, 1990). Using vegetation types as a basis for delineating different fire regimes, the Tyler Creek project area has been identified as a moderate severity fire regime. This regime is based on the effects of fire on the dominant vegetation.

Moderate-Severity Regime. This regime is associated with the mixed coniferous vegetation type (Mixed Conifer Vegetative Zone) characterized by long summer dry periods and frequent fires (25-100 years). This regime is the most difficult to characterize and is often located in a transitional position between low and high elevation forests. Fires burn with different degrees of intensity within this regime. Stand replacement fires as well as low intensity fires will occur depending on burning conditions. The overall effect of fire on the landscape is a mosaic burn.

Fire risk is the chance that a fire may start due to various ignition sources, and that the fire may threaten resources, property or life. Historical records show that lightning and human caused fires are common with lightning being the major source of fire starts. Other risks, such as recreational use and a major travel corridor, exist in the project area. In addition to the threat of a lightning caused fire, these factors contribute to the possibility of a fire occurring from human causes.

Some of the higher values at risk within the project area include private residential property, water quality and forest resources such as great gray owl habitat and rare plant species such as *cypripedium fasciculatum* and *perideridia howellii*.

The existing fuel profile in the Tyler Creek project area represents a moderate to high resistance to control under average climatic conditions. The project area consists of a timber stand which has a dense over story and a moderate amount of ground fuel and ladder fuels. This creates optimal conditions for the occurrence of a crown fire which could result in a large stand replacement fires. This type of fire also presents an extreme safety hazard to suppression crews.

### B. SOILS WATER AND FISH

This project area is located in the Tyler Creek drainage area within the Bear Creek Watershed. The area proposed for treatment is located between Tyler Creek and Schoolhouse Creek. The

northern boundary is adjacent to Schoolhouse Creek and the southern boundary is near Tyler Creek Road. Two small intermittent tributaries of Schoolhouse Creek run through the middle of the treatment area. The confluence of Schoolhouse Creek and Tyler Creek is approximately 1.0 mile downstream of the project area.

Douglas-fir and ponderosa pine are the primary overstory vegetation within the treatment area, with some incense cedar, and madrone. Oregon grape and poison oak are common understory species. The conifer component extends up to the stream banks and throughout most of the draws. Two small seasonal wetlands within the treatment area support Oregon ash and snowberry.

Much of the treatment area is located within a riparian reserve and except for the 25 feet no-cut buffers along each stream and around the wetlands. Brush and small trees would be thinned within the Riparian Reserves to encourage growth of the remaining trees and to maintain stand structure and diversity. The remaining trees would grow bigger, faster and thinning the smaller trees could encourage development of a herbaceous understory. Under the proposed action, handpiles within the Riparian Reserves would be burned.

According to the Jackson County Soil Survey, soils identified in the proposed treatment area are McNull loam. This soil is moderately deep and well drained. It was formed in colluvium derived from andesite, tuff, and breccia. Typically, the surface is covered with a layer of needles, leaves, and twigs about 1.0 inch thick. The surface layer is dark reddish brown loam about 6 inches thick. The upper 6 inches of the subsoil is dark reddish brown clay loam. The lower 20 inches is dark reddish brown cobbly clay. Weathered bedrock is at a depth of about 32 inches. The depth to bedrock ranges from 20 to 40 inches. In some areas the surface is stony or cobbly. Permeability is slow in the McNull soil. Runoff is medium and the hazard of water erosion is moderate.

The stream channels within the project area are heavily eroded because the Talent Irrigation District (TID)/Bureau of Reclamation (BOR) uses them as part of a "wasteway" bypass system. Water is released into this bypass whenever the Greensprings power plant is down for repairs. The bypass was first used in 1993 when BOR managers ordered a bypass valve opened to discharge as much as 60 cfs overland to Tyler Creek for about six months (FOG 2000). This flow eventually found its way into Schoolhouse Creek and some of its tributaries and resulted in excessive downcutting, bank erosion, and channel widening. Subsequent releases have occurred, but none have been as large or long in duration as the initial release which caused the majority of the damage. An energy dissipating system to provide safe delivery of bypass releases is currently being proposed by the BOR.

Tyler Creek has been identified by Department of Environmental Quality (DEQ) (1998) as water quality limited under Section 303(d) of the Clean Water Act. From the mouth to its headwaters, Tyler Creek is water quality limited due to temperature.

The project area is located approximately ½ mile upstream of Emigrant Reservoir. The Emigrant

dam is a barrier to upstream fish migration and is therefore considered the end of critical habitat for SONC (Southern Oregon Northern California) coho. However, through an administrative twist, this area is still considered “Essential Fish Habitat (EFH)” for coho salmon because coho may have used it historically.

Upstream distribution of fish ended at a waterfall on Tyler Creek located approximately 1 mile downstream of the project area. Oregon Department of Fish and Wildlife (ODFW 1999) found rainbow trout/steelhead (*Oncorhynchus mykiss*) and sculpin in Tyler Creek during a 1999 survey. Fish have not been observed above the barrier and are therefore not expected to occur within the project area.

### C. WILDLIFE

The proposed project is in a small stand of timber that is essentially surrounded by grassland and white oak woodland. It is a wide spot in a “stringer” of timber and riparian vegetation adjacent to Schoolhouse Creek and the Tyler Creek county road.

Special Status Species (SSS) include those species that are listed as threatened or endangered, are proposed for listing as threatened or endangered, or are a candidate for listing as threatened or endangered by the U.S. Fish and Wildlife Service under the auspices of the Endangered Species Act (ESA) of 1973, as amended. Also included are those species addressed in the

#### Special Status Species known to occur in the proposed project area:

- Pileated Woodpecker (*Dryocopus pileatus*)

The pileated woodpecker is a Bureau assessment species that is found throughout SW Oregon. Primary habitat is mature/old-growth coniferous forest in the Mixed Conifer and White Fir zones. Other habitats are also used including younger stands such as the proposed project stand. Although this species is known to occur in the proposed project, it is not known if this species is nesting in the project area.

#### Species suspected to occur in the proposed project area:

- Northern Spotted Owl (*Strix occidentalis caurina*)

The northern spotted owl is listed as a Threatened species under the auspices of the ESA. This species may use the habitat in the proposed project. The habitat in the proposed project is classified as suitable for roosting and foraging and dispersal for the spotted owl. The stand is not judged to be suitable for nesting because it lacks the physical structures usually associated with spotted owl nesting stands (remnant large trees from the previous historic stand, dense dwarf mistletoe, numerous snags). Although the stand is classified as suitable habitat, there is a low likelihood of spotted owl use for purposes other than as a stop-over point while dispersing across the landscape. This is due to the stand’s small size (approx. 16 acres), its distance from larger blocks of suitable habitat, and distance from known spotted owl nests. There are 7 known spotted owl sites within 5 miles of the proposed project, however, none of these sites are closer than 3 miles to the proposed project.

- Golden Eagle (*Aquila chrysaetos*)

While the golden eagle is not listed under the ESA and is not a Bureau Sensitive species, it is

protected under the auspices of the Bald and Golden Eagle Protection Act of 1940. There are no known nests in the proposed project area. This species uses late-successional forest habitat for nesting in this part of its range. Golden eagles build large nests in dominant overstory trees. Nest trees often have significant defect, such as a blown out top or unusually large branches, and are often among the largest diameter trees in mature and old growth stands. Golden eagle nests in SW Oregon are usually on or near the tops of major ridges. The proposed project area is in a valley, near houses and near a well traveled road. The factors make it highly unlikely that golden eagles are nesting in the proposed project area. There have been numerous golden eagle sightings in the milepost 12-13 area on Highway 66 northwest of the proposed project area for many years. These eagles probably nest in the timber near the top of the ridge to the north, more than a mile from the project area. No surveys have been conducted for this species in the project area, none are required.

- Great Gray Owl (*Strix nebulosa*)

The great gray owl is a Bureau-Sensitive and Survey and Manage category "C" species. Great gray owls, in this part of their range, nest in mature/late seral mixed conifer and white fir forests, and forage primarily in the meadows/grassland or early seral stand conditions of conifer forests. The proposed project area is judged to be suitable nesting habitat for this species. There are no documented sightings of this species in the proposed project area or in the general vicinity. It is possible that this species nests in the proposed project area. The closest known nest site for this species is about 2 miles away. There are 3 sites at this same approximate distance. Because the proposed project is not likely to negatively affect the habitat characteristics of the stand that are thought to be important to this species, no surveys for the species were required or performed.

- Northern Saw-whet Owl (*Aegolius acadicus*)

The Northern Saw-whet Owl is a Bureau assessment species. Primary habitat is dense conifer forest intermixed with meadows in the Mixed Conifer and White Fir Zones. Little is known about this owl in SW Oregon. No surveys have been performed, none are required.

- Western Bluebird (*Sialia mexicana*)

The western bluebird is a Bureau assessment species. Primary habitat is naturally occurring open areas or early seral conifer forest. Cavities in trees and snags occurring in open areas are natural nest sites for bluebirds. No surveys have been performed, none are required.

- Flammulated Owl (*Otus flammeolus*)

The flammulated owl is a Bureau assessment species that is occasionally observed throughout SW Oregon. Although this species is not listed as a Survey and Manage species, the S&M ROD calls for the retention of additional large snags in harvest units in areas where this species occurs. Primary habitat is conifer forest intermixed with oak-woodland and grassland in the Mixed Conifer Zone. This species nests in cavities created by other birds species (pileated woodpecker, flicker) in large pine trees and snags. No surveys have been performed, none are required.

- California Mountain Kingsnake (*Lampropeltis zonata*)

The California mountain kingsnake is a Bureau assessment species. This species is known to occur throughout SW Oregon. Preferred habitat is oak-woodland and mountain chaparral plant communities in the Interior Valley and Mixed Conifer Zones. The non-conifer and forest edge areas within the proposed project area are suitable for this species.

- Fisher (*Martes pennanti*)

The fisher is a Bureau assessment species. This species may occur in the proposed project area.

Preferred habitat is dense conifer forests in the mixed conifer and white fir zones. There are no specific protection measures prescribed for this species. There are no known records of this species being present in the proposed project area. No surveys have been performed, none are required.

- American Marten (*Martes americana*)

The marten is a Bureau assessment species. This species may occur in the proposed project area. Preferred habitat is mature/old-growth conifer forests that have an abundance of large down woody material and standing snags in the Mixed Conifer and White Fir zones. There are no known records of this species being present in the proposed project area. No surveys have been performed, none are required.

- Pacific Pallid Bat (*Antrozous pallidus*)

The Pacific pallid bat is a Bureau assessment species. Although this species is not listed as a Survey and Manage species, the S&M ROD calls for the protection of specific types of roost sites which are known or assumed to be occupied by this species. Preferred habitat is canyons and other rocky areas near water sources in arid areas. This species probably roosts in snags in the proposed project area. No surveys have been performed, none are required.

- Townsend's Big-eared Bat (*Plecotus townsendii*)

The Townsends big-eared bat is a Bureau sensitive species. Although this species is not listed as a Survey and Manage species, the S&M ROD calls for the protection of specific types of roost sites which are known or assumed to be occupied by this species. Preferred roosting habitat is caves, crevices, and abandoned mines. There are no known records of this species being present in the proposed project area. No surveys for this species have been conducted in the proposed project area, none are required.

- Fringed Myotis (*Myotis thysanodes*)

The fringed myotis is a Bureau assessment species. Although this species is not listed as a Survey and Manage species, the S&M ROD calls for the protection of specific types of roost sites which are known or assumed to be occupied by this species. This species appears to be a habitat generalist since it is found in both forested and non-forested habitats. Caves, crevices, abandoned buildings, or other similar structures are required for nursery colonies. There are no known records of this species being present in the proposed project area. No surveys for this species have been conducted in the proposed project area, none are required.

- Terrestrial mollusks (slugs and snails)

Pre-disturbance surveys for Survey and Manage terrestrial mollusks were completed in the fall of 2000 and resulted in no sites for Survey and Manage Mollusks.

- Cascade Frog (*Rana cascadae*)

This species is a Bureau tracking species and may be present in the proposed project area. No known records exist for this species in the proposed project area. No surveys have been conducted, none are required. If present, this species would be restricted to the aquatic (stream) habitat and the immediate shoreline of the streams.

- Common Kingsnake (*Lampropeltis getulus*)

The Common kingsnake is a Bureau tracking species. This species is known to occur throughout SW Oregon. Preferred habitat is oak-woodland and mountain chaparral plant communities in the Interior Valley and Mixed Conifer Zones. The non-conifer and forest edge areas within the proposed project area are suitable for this species.

## CHAPTER IV ENVIRONMENTAL CONSEQUENCES

### INTRODUCTION

This chapter forms the scientific and analytic basis for comparison of alternatives. Discussions include the environmental impacts of the alternatives and any adverse environmental effects which cannot be avoided should the proposal be implemented. The impact analysis addresses direct, indirect, and cumulative impacts on all affected resources of the human environment, including critical elements. It also identifies and analyzes mitigation measures, if any, which may be taken to avoid or reduce projected impacts.

Only substantive site specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this document. If an ecological component is not discussed, it should be assumed that the resource specialists have considered effects to that component and found the proposed action or alternatives would have minimal or no effects. General or "typical" effects from projects similar in nature to the proposed action alternative are also described in the documents to which this plan is tiered.

### A. FUELS

The proposed action alternative would reduce the overall density of ladder and surface fuels of the stand which is proposed for treatment. This would reduce extreme fire behavior as measured by flame length. By altering fire behavior, the duration of a fire and the amount of acres burned in a high intensity fire would also be reduced. This change in fire behavior would reduce the mortality of conifers in the event of a wildfire.

Prescribed burning is the only proposed management activity which could have a notable adverse effect on local and downwind air quality. Air quality of local communities could be impacted for brief periods of time due to prescribed burning. Prescribed burning under late fall, winter and early spring conditions consumes less of the larger fuels, creating fewer emissions. Smoke dispersal is easier to achieve due to the general weather conditions that occur at this time of year.

All burning would be done in accordance with the Oregon Smoke Management Plan, which tries to prevent prescribed fire smoke from being carried to or accumulate in designated smoke-sensitive areas. This plan is in conformance with federal air quality and visibility requirements to protect public health and encourage the reduction of emissions.

#### Effects of the No Action Alternative

The current trend of increasing stand density which results in increased mortality to the timbered stand would continue. Ladder and surface fuels would increase within the stands. Increasing stand densities and fuel loadings would increase the chance of more acres that would burn in high intensity fires within the Tyler Creek project area. Fire fighter safety would continue to be an issue as well as the potential of resource damage.

Air quality would be impacted in the event of a large wildfire. Emissions from wildfires are significantly higher than from prescribed burning. The wildfires which occurred in southern Oregon in 1987 emitted as much particulate matter as all the burning that occurred within the state that year.

## **B. SOILS, WATER, AND FISH**

It is very unlikely that burning the handpiles within Riparian Reserves would contribute any sediment to the small intermittent (dry in the summer and fall) and perennial streams within the unit. The 25 feet no-cut buffers would ensure that any open areas of ash or soil would be unable to travel into the stream channel. Surface runoff in this area is very infrequent and thick layers of duff and ground vegetation would capture any sediment being carried by surface runoff. There is a less than negligible chance of negatively affecting water quality for resident fishes and aquatic organisms. In addition, the piles should not contribute any sediment above natural background levels. Normally, these riparian systems would burn occasionally, contributing nutrients, ash, and sediment until the landscape healed the following spring. Due to the location of the units, Riparian Reserves on fish-bearing streams would not be affected.

Thinning of vegetation within the unit will have no effect on the stream channels. The 25 feet buffers will minimize disturbance along the stream banks. Because the treatment area is so small, no noticeable increase in flows would occur as a result of vegetation removal.

In the larger landscape, burning the handpiles should reduce fuels in the units. If so, then wildfires that would occur in the future would be more likely to be a more natural, patchy ground burn, with a restorative effect on the Riparian Reserves (healthier and more diverse plant communities, increased food and nutrient abundance for wildlife, birds and aquatic animals).

Under this proposal, a small area is proposed for an underburn. A hand line would be used to control the burn along private land and the 25 feet no-cut buffer would be used as a boundary along the north side of the underburn. The no-cut buffer would not be part of the prescribed underburn. However, instead of digging hand line parallel to the stream, fire will be allowed to back in to this area. This would mimic natural fire conditions.

### Effects of the No Action Alternative

Under the No Action Alternative, there would be no change in the Riparian Reserve condition and the potential for larger hotter fires in this area would persist. A hot wild fire in this area could eliminate down large woody material and litter, leaving nothing to stop soil erosion from the winter rains. Schoolhouse Creek and its tributaries in this area are currently in poor condition and this sedimentation could further affect resident trout and other aquatic organisms. Emigrant Reservoir would eventually capture any sediment added to the system.

### NMFS Consultation

This project is determined to have “No Affect” on listed coho salmon, their Critical Habitat, or Essential Fish Habitat. The project is “No Affect” because the project’s location is 3 ½ miles

upstream of Emigrant Dam, and therefore, any possible sediment caused by this action would be trapped in Emigrant Reservoir. In addition, the type of project and site conditions would ensure that there is a less than negligible chance of negatively affecting water quality for resident fishes and aquatic organisms.

### **C. WILDLIFE**

#### Northern Spotted Owl (*Strix occidentalis caurina*)

Approximately 16 acres of suitable spotted owl habitat would be affected by the proposed project. The loss of suitable spotted owl habitat as a result of this proposed project requires consultation with the U.S. Fish and Wildlife Service (USFWS). The proposed project is more than 1.2 miles (provincial home range radius) from the nearest known spotted owl site. The project would not result in incidental take of any spotted owl sites. For USFWS consultation purposes the proposed action is classified as “may affect, not likely to adversely affect.”

Consultation with the USFWS on this project occurred as part of the Medford District programmatic consultation. A Biological Opinion addressing the programmatic consultation was issued by the USFWS on October 18, 1996. The USFWS concluded that the types of projects covered in the consultation, including the type of project proposed here were not likely to jeopardize the survival of the spotted owl as a species.

- Great Gray Owl (*Strix nebulosa*)

There is potential for disturbance to nesting owls (and other nesting birds as well) due to mechanical noise associated with the treatment as well as from smoke from spring time burns. See below for project design features (PDFs) and proposed Mitigating Measures to address the potential disturbance issue.

- California Mountain Kingsnake (*Lampropeltis zonata*)

Action alternative: If present, this species could be affected by the reduction in the amount of coarse woody debris in the proposed project area (less hiding cover). If the project area is maintained in the future by burning repeatedly, woody debris levels would be kept low in the long term.

- Fisher (*Martes pennanti*)

It is largely unknown what steps are necessary to protect the species and its habitat other than retention/protection of potential dens, which are hollow logs and trees, large cavities in trees and snags, and large horizontal brooms. The proposed project area has very few if any of these structures due to the young age and small size of the trees present. The proposed project area also does not appear to be very effective habitat for this species due to its relative isolation from larger tracts of suitable habitat, the presence of a heavily used road to the immediate south of the unit, and the presence of at least one house on the east end of the proposed project area.

- American Marten (*Martes americana*)

There are no specific protection measures prescribed for this species. It is largely unknown what steps are necessary to protect the species and its habitat other than retention/protection of potential dens, which are hollow logs and trees, large cavities in trees and snags, and large horizontal brooms. The proposed project area has very few if any of these structures due to the young age and small size of the trees present. The proposed project area also does not appear to be very effective habitat for this species due its relative isolation from larger tracts of suitable habitat, the presence of a heavily used road to the immediate south of the unit, the presence of at least one house on the east end of the proposed project area, and the relative low elevation and resultant lack of a major true fir component in the stand.

Effects of the No Action Alternative on Wildlife

This alternative would have no immediate negative effect on species using the area. However, the fuel accumulation in the area would continue to grow. This fuel buildup could facilitate stand replacement type wildfires. In the event of a stand replacement fire in the project area, many acres of suitable habitat for some or all of these species could be destroyed. The effectiveness of the proposed fuels reduction project and the likelihood of a stand replacement event in the area are addressed in the fire/ fuel section of this document.

**CRITICAL ELEMENTS**

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EAs.

Table 12 Critical Elements

Critical Element	Affected		Critical Element	Affected	
	Yes	No		Yes	No
Air Quality		✓ *	T & E Species		✓ *
ACECs		✓	Wastes, Hazardous/Solid		✓
Cultural Resources		✓	Water Quality		✓ **
Farmlands, Prime/Unique		✓	Wetlands/Riparian Zones		✓ **
Floodplains		✓	Wild & Scenic Rivers		✓
Nat. Amer. Rel. Concerns		✓	Wilderness		✓
Invasive, Nonnative Species		✓*	Environmental Justice		✓

\*These affected critical elements could be impacted by the implementing the proposed action. Impacts are being avoided by project design.

\*\*These affected critical elements would be impacted by implementing the proposed action. The impacts are being reduced by designing the proposed action with Best Management Practices,

Management Action/Direction, Standard and Guidelines as outlined in the Environmental Impact Statements (EIS)/Record of Decisions (*RMP*) (*USDI BLM 1995*)(*USDA FS; USDI BLM 1994*) tiered to in Chapter 1. The impacts are not affected beyond those already analyzed by the above mentioned documents.

## **CHAPTER 5 AGENCIES CONSULTED AND PUBLIC PARTICIPATION**

### **A. LEGAL CONSULTATION**

- National Marine Fisheries Service
- US Fish and Wildlife Service

### **B. PUBLIC PARTICIPATION**

#### **1. Publicity**

Public notice of the availability of this EA was provided through advertisement in the Medford Mail Tribune and the BLM Medford District's central registration and recording system.

#### **2. Notification**

A copy of the EA was mailed to the following organizations:

- Friends of the Greensprings (FOG)
- Association of O&C Counties
- Audubon Society
- Headwaters
- Klamath Siskiyou Wildlands Center
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Natural Resource Council
- The Confederated Tribes
- The Pacific Rivers Council
- SOTIA
- Shasta Nation
- Confederated Tribes of the Rogue-Table Rock and Associated Tribes
- Confederated Bands Shasta Upper Klamath Indians
- Cow Creek Band of Umpqua Indians
- Confederated Tribes of Grand Ronde
- Confederated Tribes of Siletz
- Klamath Tribe
- Quartz Valley Indian Reservation (Shasta Tribe)

#### **3. Availability**

A copy of this EA is available upon request from the Ashland Resource Area, Bureau of Land Management, 3040 Biddle Rd., Medford, OR 97540, (541)618-2200. It is also accessible online at [www.or.blm.gov/medford/](http://www.or.blm.gov/medford/).

The EA has also been placed in the public reading room at the Bureau of Land Management office (above address) and a copy sent to the Southern Oregon University Library.