ENVIRONMENTAL ASSESSMENT

for

Hand Pile Burning
For Hazard Fuel Reduction

EA# OR 118-02-030

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

August 2002

GLENDALE RESOURCE AREA
ENVIRONMENTAL ASSESSMENT
HAND PILING BURNING FOR HAZARD FUEL REDUCTION

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Chapter 1: Purpose and Need For Action

A. Introduction, Purpose and Need for Action

1. Introduction

The Hand Piling Burning for Hazard Fuel Reduction project would treat created fuel concentrations scattered throughout the Glendale Resource Area of the Medford Bureau of Land Management. Burning of the piles would be done in the fall/winter season after significant rainfall has occurred. Work is expected to begin the fall of 2002.

2 Purpose and Need

The Glendale Resource Area (GLRA) annually conducts a large young stand management program throughout the Resource Area. This includes brushing and pre-commercial thinning with associated maintenance brushing. These actions create slash with a consequent increase of fire hazard. Wild land fire hazard has been reduced with the hand piling of the created slash. The purpose of the proposed treatment would be to reduce the fire and fuel hazard created by the various silvicultural practices by reducing fuel loadings by burning created piles. Reduction in fuel load would decrease wild land fire intensity, flame length, and rate of spread if a wildfire occurs. These changes in wild land fire behavior reduce the resistance to wild land fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater when the fire is less intense, slower moving, and has lower flame lengths.

The purpose of this environmental assessment (EA) is to assist in the decision-making process by assessing the environmental and human affects resulting from implementing the proposed project or alternative. The EA would also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact (FONSI) is appropriate.

This EA conforms to the following documents :

(1) the Final EIS and Record of Decision (ROD) dated June 1995 for the Medford District Resource Management Plan dated October 1994;

(2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994;

(3) 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 its Attachment A entitled 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 dated April 13, 1994.

(4) Record of Decision and Standards and Guidelines Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

B. Project Location and Land Use Allocations

Project locations are scattered throughout the GLRA. Table 1 (Appendix A) lists the individual units proposed for fuel and hazard reduction treatment and features of each unit. Unit maps are located in Appendix B. Treatment areas are located in the Matrix, LSR, and Riparian Reserve land allocations.

C. Scoping Issues Relevant to the Proposal

Several issues of potential concern were raised during the scoping phase of project planning. They are:

1. Air quality concerns and the requirements of the Oregon Smoke Management Plan (OSMP).

2. The proximity of the portions of the GLRA to the OSMP designated non-attainment areas of Grants Pass and Medford.

3. Potential for escaped fires as a result of pile burning.

4. Potential impacts to Special Status, Survey and Manage, and T&E species.

5. Potential impacts to some Riparian Reserves and water quality.

Chapter 2: Description of Alternatives

A. Proposed Action and Alternatives

1. Alternative 1: The No Action Alternative

The "no-action" alternative is defined as not implementing any aspect of the proposed action alternative. 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 whether or not it is consistent with the Medford District RMP.

The no action alternative is not a "static" alternative. Implicit in it is a continuation of the environmental conditions and trends that currently exist in the project areas. This includes trends such as vegetation succession and consequent wildlife habitat changes, and an increase in fire hazard.

2. Alternative 2: Proposed Action

All pre-commercial thinning and brushing units listed in Table 1 (Appendix A) would have the existing piles burned. When only portions of a unit or stand are to be treated, the areas selected for hazard reduction treatment are at critical points on the sites such as where the highest potential loss would be experienced if a wildfire occurred. The actual extent of slash treatment will be dependant on available funding.

B. Project Design Features

Project design features (PDFs) are included for the purpose of reducing anticipated adverse environmental impacts identified in the scoping process and which might stem from the implementation of the proposed action. This section outlines these PDFs.

1. Air Quality / Smoke Management

To conform with air quality standards and guidelines, all prescribed burning would be managed in a manner consistent with the requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality's Air Quality and Visibility Protection Program. When burn units are adjacent to rural residential areas burning would be timed to produce the least amount of residual smoke possible. This can be accomplished by burning when conditions for smoke dispersal are optimal such as during rainy days and periods when atmospheric instability is present.

Patrol and mop-up of burned piles would occur when needed to prevent burned areas from rekindling and potentially becoming an escaped fire.

2. Fire and Fuels

Hand pile slash greater than 2' long and less than 7" diameter. Chainsaws may be utilized to reduce the size of the slash to sizes appropriate for hand piling. Maximum pile size would be

approximately 5' in diameter by 6' in height. All piles would be covered with a 5' x 5' sheet of 4-mil polyethylene plastic. At least 3/4 of the piles surface would be covered and the plastic anchored to preserve a dry ignition point. Slash piles would not be constructed on logs, stumps, talus slopes, or within 25' to wildlife trees with nest structures, in roadways or drainage ditches. Piles would not be closer than 10' to reserved trees, or 25' to a unit boundary.

Ignition of piles would be with drip torches or other hand held devices. Burning would be done in the fall/winter season after significant rainfall has occurred. Significant rainfall amounts would be one inch (1") in a 48 hour period, or a cumulative amount that wets the litter and duff layer and penetrates the mineral soil layer to 1/4 inch or more. These conditions would typically prevent the spread of fire outside the burning pile and minimize the risk of an escape.
A prescribed burn plan would be prepared to address burning objectives and operational concerns. Piles would be ignited except those within a designated no treatment zone of a riparian reserve or S&M, T&E buffers.

3. Special Status Species and Cultural Resources

Cultural resource surveys, surveys for special status plant and animal species and/or species of concern have been conducted. Measures appropriate to protect cultural sites and/or species will be taken. These could include: timing of treatment, buffering of areas to preclude treatment, or no treatment of the area.

To the extent possible, piles located in talus areas known to be occupied by the Del Norte salamander would not be ignited.

In habitat areas reserved for red tree vole populations, no slash pile burning shall occur within 25' of known nest sites identified from surveys.

During periods of high temperatures and low ground moisture conditions, molluscs may seek out covered piles as refugia. To reduce potential impacts to molluscs and mollusc habitat, hand piles would be created away from talus, rock structures, coarse woody debris, and pile burning would be done when temperatures and ground moisture conditions are conducive to mollusc dispersal away from covered piles.

Populations of Special Status, Threatened or Endangered, or Survey and Manage Plants will be buffered by about 100 feet. Pile burning will not occur within these areas.

4. Remnant Habitat for Fungi and Bryophytes

As part of this prescription, special treatment guidelines for mature and old growth trees providing remnant habitat for fungi and bryophytes would be applied. No hand piling or hand pile burning would occur within the drip-line of remnant trees (all land allocations).

5. Riparian Reserve Treatment

A 25' no treatment buffer would be retained along all streams and other riparian areas. These buffers would extend from the edge of the riparian vegetation or, if no riparian vegetation exists, from the edge of the stream channel and would be delineated during project implementation.

Due to differences in vegetation and silvicultural treatment, pile density in Riparian Reserves is typically 5 to 10% lower than the upland areas. The amount of slash generated may necessitate placing a hand pile within a no treatment zone area in order to remove the fuel up to the no treatment zone line. Hand piles within Riparian Reserves would be ignited, except those within the no treatment zones.

6. Seasonal Operation Constraints

Seasonal operating constraints would be per Biological Opinion #1-7-96-F-392 for BLM silviculture projects 1996 through 2005 and the RMP:

Spotted Owls - No work involving chainsaws would be permitted within 0.25-mile of an known active spotted owl nest or activity center between March 1 and June 30, or until the action agency biologist determines that the owls are non-nesting, no young are present, or juveniles have sufficiently dispersed. (Note: The spotted owl related operating season is less restrictive than that required in the RMP, however, the fact that it is specifically approved by the USFWS supports it being treated as a permissible exception.)

Marbled Murrelet - In Zones A and B, disturbing activities within 0.25-mile of known occupied marbled murrelet sites, or unsurveyed suitable marbled murrelet habitat, are restricted from April 1 - August 5. Daily restrictions apply August 6 - September 15, from 2 hours before sunset to 2 hours after sunrise.

In Zone C, work involving chainsaws would be permitted within 0.25-mile of known occupied marbled murrelet sites, or unsurveyed suitable marbled murrelet habitat, no earlier than two hours after sunrise and no later than two hours before sunset from April 1 - August 5.

In Zone D, no restrictions.

Bald Eagle - Work activities within 1/4 mile non line-of-sight or ½ mile line-of-sight of active bald eagle nests would be restricted to between January 1 - August 1.

Peregrine falcons - Avoid disturbance to pairs between February 1 - August 1 (RMP).

Other raptors - Between March 1 and July 15 and within 1/4 mile of nest sites or activity centers, no disturbances that may disturb or interfere with nesting (RMP).

Chapter 3: Environmental Consequences

A. Introduction

Only substantive site-specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action or alternatives would have minimal or no affects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action or alternatives: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; floodplains; invasive species; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; wilderness areas; environmental justice and energy resources and transmission. In addition, hazardous waste or materials are not directly involved in the proposed action or alternatives.

B. Effects of the Proposed Action

1. Soils and Water

a. Affected Environment

Units proposed to be treated are distributed throughout the Glendale Resource Resource Area and most fifth field watersheds. Removal of fuels, hand piling, and burning will, for the most part, be done outside of designated no treatment zones (NTZ) within the Riparian Reserves. Occasionally a hand pile would occur within the NTZ but none of these piles would be burned. Proposed fuels treatments would occur in a variety of stand and vegetation types throughout the Glendale Resource Area. Geology, soils and vegetation communities are quite variable from west to east. Since this is the case it is difficult to describe each and every unit. Watershed Analysis documents for each of these major watersheds are available for a more in depth coverage of the environment. Fuels hazard reduction activities would occur in silviculture treatment units. Several thousand acres per year are treated (brushing/ PCT).

b. Environmental Consequences

1) Alternative 1: No Action

The wildland fire hazard with added slash fuels would increase immediately following the slash treatments. With increased fire hazard would come increased likelihood of damaged soils from hot fire occurrences in the future. This would cause highly reduced organic matter content in the upper mineral soil and on the soil surface. This could have two consequences on soil and water quality:

a) Increased erosion and sedimentation. Sediment would reach class 3 and 4 streams and would reach fish streams in pulses depending precipitation rates following fire. As new plant growth would slowly take place (see 2 below), sediment quantities to the stream system would diminish through the short term until approximately in 10 years sediment rates would return to current levels.

b) Due to loss of duff/litter layer and loss of the organic matter in the upper mineral soil as a source of nutrients, soil productivity would decrease substantially within these units.

2) Alternative 2: Proposed Action

Assuming a high average of 40 piles per acre with each pile covering 28 ft^2, burned spots after piles are burned would cover less than three percent of the ground surface. Assuming that most of the burned piles will result in a spot on which soil has substantial reduction of organic matter, this would result in reduction of soil productivity for the individual spots. Since the burned spots will occupy less than 3% of the treated units the overall reduction of soil productivity rate will be minimal. Erosion/sedimentation should not be a factor as the spots would be islands surrounded by a matrix of vegetative cover.

A wildland fire would burn with less intensity than under the no action alternative. Any resultant increase in erosion/sedimentation would thus likely be far less than without the treatment. Also the resulting decrease in soil productivity would likely be far less than without the treatment.

At the 5^{th} and 6^{th} field watershed level, cumulative effects of the proposed treatment on additional stream sediment over background levels would be minimal and would not likely be measurable.

2. Fire and Fuels

Hazard is defined as the existence of a fuel complex that constitutes a threat of wild land fire ignitions, unacceptable fire behavior and severity, or suppression difficulty.

Fuels include dead and down woody debris, and live vegetation. Stands that are not or will not be at or near mature conditions within 20 year time frame are still more susceptible to stand replacement from wildland fire events due to conditions such as thin bark and high crown ratios.

a. Environmental Consequences

1) Alternative 1: No Action

The wildland fire hazard and fuel hazard would increase immediately following the slash treatments. Increased fire behavior intensities, flame lengths and rates of spread will result from the added fuel levels. The threat of increased fire behavior will continue to exist until the fines have fallen off and the remaining larger fuels have compacted. This may reduce rates of spread but increased wildland fire intensities and flame lengths will still exist. lternative 2: Proposed Action

Wildland fire hazard will be reduced on sites where slash has recently been created and hand piled. A further reduction in the fire hazard will occur when ignition of the hand piles is completed. Reduction in fuel load will decrease wildland fire intensity, flame length, and rate of spread if a wildfire occurs on the site. These changes in wildland fire behavior reduce the resistance to wildland fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater as the fire is less intense, slower moving, and has lower flame lengths.

3. Wildlife

Although a range of species may utilize the areas proposed for slash treatment, the potential impacts are minimal. This discussion will focus on potential impacts on T&E and survey and manage species.

a. Affected Environment

The areas proposed for fuel reduction treatments include stands that are generally less than 30 years old. Stands less than 30 years old do not provide typical nesting, roosting, or foraging habitat for spotted owls, marbled murrelets, and bald eagles. Bald eagles and spotted owls may occasionally use young stands for foraging. This foraging is most likely associated with edges where adjacent large trees provide perching opportunities and cover.

There are no currently known bald eagle nests currently within 0.5 mile of the proposed treatment units. There are no currently known peregrine falcon nests within 0.5 mile of the proposed treatment units. There are no known marbled murrelet sites within 0.25 miles of the proposed treatment units.

The Del Norte salamander has been moved to Category D in the Survey and Manage SEIS ROD, and requires management for known sites only. Some project areas are expected to occur in or adjacent to occupied talus areas.

Blue-gray and papillose tail dropper slugs have been removed from the Survey and Manage list (S&M SEIS ROD). The Siskiyou shoulderband snail (*Helminthoglypta hertleini*) is a dry site associated species, and utilizes rock structures and CWD. Key habitat features used by the survey and manage species, and molluscs and salamanders in general, would be avoided (CWD, talus and rock structures, large deciduous trees). The fuels reduction procedures are expected to occur in some dry site areas that may be inhabited by the Siskiyou shoulderband snail, and have only minimal impacts to survey and manage species.

b. Environmental Consequences

1) Alternative 1: No Action

For some species, particularly small mammals, large quantities of slash may provide hiding cover. However, large quantities of untreated slash may also create obstacles to the movement of some terrestrial species and impediments to the foraging efficiency of some raptors.

The greatest concern is the increased risk of stand destroying fires associated with high fuel loading. As long as fuel levels remain high, the risk of stands being set back to earlier seral stages remains elevated and the ability to effectively manage for mature forests and associated wildlife species is greatly compromised.

For spotted owls, no impacts to suitable foraging habitat are anticipated as a result of the No Action alternative. This is based primarily on the fact that foraging by spotted owls in 15 - 30 year old stands is typically confined to the edges. The greatest risk is associated with increased fire hazard.

For marbled murrelets, young stands do not provide suitable nesting habitat. Additionally, the areas proposed for fuel reduction treatments are within the marbled murrelet zone 1 and zone 2, but are within a basin where there have been no murrelet detections and the probability of them occurring is considered very low. Based on this, there are no anticipated impacts to the marbled murrelet.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat. Based on this, there are no anticipated impacts to the bald eagle. The greatest risk is associated with increased fire hazard.

For Del Norte salamanders, survey and manage molluscs, and red tree voles, there are no anticipated direct impacts associated with the No Action alternative. The greatest risk is associated with increased fire hazard.

2) Alternative 2: Proposed Action

In general, reducing fuel levels would remove habitat for smaller wildlife species strongly associated with this type of ground cover. Because not all slash piles are entirely burned and not all slash is removed, some of the ground cover benefits provided by slash would remain intact. Estimates are that 5-15% of the targeted fuels will not be consumed. Overall, the greatest benefit associated with fuel reduction is the ability to more effectively manage stands to achieve mature forest conditions.

For spotted owls, fuel reduction will not have broad implications for the suitability of foraging habitat. This is based primarily on the fact that spotted owls typically confine foraging to the edge of young stands. Restricting the operation of power equipment within 1/4 mile of nest sites or activity centers of all known pairs and resident singles between March 1 - June 30 will minimize potential disturbance. Reducing fuel levels will enhance the long term ability to manage critical owl habitat and LSR areas for mature forest conditions, and aid in the recovery of T&E species using these areas.

For marbled murrelets, young stands do not provide suitable nesting habitat. Additionally, the areas proposed for fuel reduction treatments are outside of the known range for marbled murrelets. Based on this, fuel reductions are not anticipated to result in impacts to the marbled murrelet.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat. Based on this, there are no

anticipated direct impacts to the bald eagle. Reducing fuel levels will enhance the long term ability to manage these areas for mature forest conditions.

For Del Norte salamanders, survey and manage molluscs, and red tree voles, there are no anticipated direct impacts. Key habitat features and nest trees will be avoided, and no suitable habitat removed. Reducing fuel levels will enhance the long term ability to manage these areas for mature forest conditions.

4. Fisheries

a. Affected Environment

Most of the units proposed for treatment do not contain Riparian Reserves. Most of the Riparian Reserves that are in the proposed treatment units are intermittent streams which are not used by fish. Several streams are perennial but are not used by fish. A few fish-bearing perennial streams are present within the proposed treatment units and support resident trout. Many of the intermittent streams in the project area are ephemeral and flow for only a short time each year. As a result, plants which are adapted to moist soil conditions may be present only within a few feet of the stream or not at all. Other intermittent streams and some perennial streams are in deep V-shaped channels with no floodplain, allowing riparian vegetation to grow only within a few feet of the stream. Outside of these narrow zones of riparian plants, the vegetation in the Riparian Reserve is similar to that which is found in the drier upland areas outside of the reserves. The natural stand condition in the areas outside the immediate riparian zone would be an open overstory and sparse understory dominated by fire-adapted species. Due to past logging practices and the exclusion of fire, forest stands in the project area are typically more dense and brushy than under natural conditions and have a higher fuel loading.

b. Environmental Consequences

1) Alternative 1: No Action

If no action is taken to hand pile and burn slash created by brushing and pre-commercial thinning, fuel loading in the Riparian Reserves will pose a greater wildfire hazard than if the proposed action of hand piling and burning slash is implemented. The risk of a stand-destroying fire would remain high in much of the Riparian Reserve acreage, including miles of streams which would be vulnerable to the effects of wildfire outside the normal range of intensity (see Soil and Water effects).

2) Alternative 2: Proposed Action

Fifteen units are in the Grave Creek watershed and would have No Effect on Southern Oregon/Northern California coho salmon and their critical habitat because coho salmon do not currently inhabit this 5th field watershed. The last documented presence of coho salmon in the Grave Creek watershed was by the US Fish and Wildlife Service in 1954 (personal communication with ODFW, Central Point, Oregon).

Two units with streams running through them in the Wild Rogue 5th field watershed, Trappers Cabin (upper Kelsey Creek) and Walker Return # 14 (upper Mule Creek), are several miles from

coho habitat. Six units in the Middle Cow Creek 5th field watershed have no streams in or adjacent to them and therefore have no mechanism for routing sediment to streams:

Lost Fortune 8
Fortune Return 9
Fortune Branch 1
Reuben Overlook #2
Thin Horse #6
Galesville Return #9

Seven units in the Middle Cow Creek are adjacent to non-fish streams:

Riffle Creek #2B: 1/4 mile from Riffle Creek
Whitehorse #7: ½ mile from Whitehorse Creek
Koeler Jones #2: 1 mile from Cow Creek
McCollum Creek #1: 1 ½ miles to Woodford Creek
Bonnie Ridge K: about 3 miles to coho in Riffle Creek
Fortune Branch F: about 2 miles to coho in Canyon Creek
Sawmill Gap #2: about 1 ½ miles to coho in Cow Creek

Five units with small non-fish streams in them are located in Upper Cow Creek near the head of Galesville Reservoir as little as 1/4 mile from Cow Creek. However, Galesville Dam is a barrier to coho salmon so salmon would be unaffected if sediment were to enter streams or if there was a loss of stream shade on the small, non-fish streams adjacent to burn units:

Galesville Return units 3,4,5,6 and 8

Burning in any of the units in the Middle Cow Creek and Wild Rogue 5th field watersheds would have no effect on coho salmon because:

- Hand pile and burn treatments would have extremely limited potential for creating bare soil areas large enough to contribute sediment to streams as compared to broadcast burning.

- Burning would be done in the fall/winter season after significant rainfall has occurred. Significant rainfall amounts would be one inch (1") in a 48 hour period, or a cumulative amount that wets the litter and duff layer and penetrates the mineral soil layer to 1/4 inch or more. These conditions would typically prevent the spread of fire outside the burning pile and minimize the risk of an escape.

- No units are located directly on coho salmon habitat

- Burn units are not concentrated in any particular 7th field watershed that supports coho salmon

The short and long term effects of the proposed action are beneficial at the site and watershed levels, as wildfire hazard will be reduced in and around Riparian Reserves. No cumulative effects are anticipated from the proposed action as burning will be widely dispersed spatially at

the site and watershed levels.

5. Botany

a. Affected Environment

The early-successional units have very little native habitat remaining due to past timber management practices. Older stands are more likely to contain habitat for late-successional species, particularly Survey and Manage vascular plants, lichens and bryophytes. Some units are non-forest habitats, due to unfavorable soils; these units are particularly likely habitats for Special Status species and the listed endangered *Fritillaria gentneri*. All units have been surveyed for Special Status, Threatened or Endangered, or Survey and Manage vascular plants, lichens and bryophytes.

Small buffers (about 100') will be established around plant populations to protect the plants from direct disturbance from brushing, thinning and pile burning, and to protect immediate microclimate conditions.

b. Environmental Consequences

1) Alternative 1: No Action

Under the No Action alternative, the fuel loadings would increase the wildfire risk for any late-successional plant species found in these units. High fuel loads could lead to catastrophic wildfire that could eliminate populations and any late-successional habitat that may occur. Conversely, wildfire may be neutral or beneficial for some fire-adapted plants.

2) Alternative 2: Proposed Action

The hand piling and burning of hand piles should reduce the threat of catastrophic fire to any late-successional plants found in these units, providing a possible beneficial effect. Buffers will provide protection to plant populations which could be impacted by pile burning and ground disturbance, and would protect interior forest microclimate. No effects are anticipated to Special Status, Threatened or Endangered, or Survey and Manage plants.

Chapter 4: Agencies and Persons Consulted

A. Public Involvement

No formal public scoping or involvement was held on this proposed project. Extensive discussions about the Resource area's prescribed burning program have been held with Oregon State Department of Forestry.

B. Availability of Document and Comment Procedures

The EA will be available for review at the BLM Medford District Office, the Medford District's web site (www.or.blm.gov/Medford/planning) or by request. A 15 day comment period will begin after public notification in the local newspapers. Comments, including names and street addresses of respondents, will be available for public review. Individual respondents may 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 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 form individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection on their entirety.

C. Interdisciplinary Team

INTERDISCIPLINARY TEAM	TITLE	RESOURCE VALUES ASSIGNED
Brian Keating	Fuels Mgmt. Specialist	Team Lead, Fire Risk/Hazard, Fuels Treatments, Forest Health
Marlin Pose	Wildlife Biologist	Wildlife, Prime or Unique Lands
Rachel Showalter	Botanist	Threatened & Endangered Plants
Robert Bessey	Fisheries Biologist	Fisheries
Amy Sobiech	Archaeologist	Cultural Resources
Jim Brimble	Silviculturist	Silviculture

Martin Lew
Natural Resource Specialist
Reviewed for format and consistency

8/29/02
Date

TABLE 1: PROPOSED HAZARD REDUCTION UNITS

Previous Silviculture Treatment	Year	Township Range	Section	Unit Name	Unit Acres	Riparian Reserve Identified	Wildlife Seasonal Restrictions	S&M, T&E Plant	Watershed Identified
	2002	34s7w	11	Angora Goat 11-4A	18				Grave Creek
	2002	34s7w	10	Angora Goat 11-4B	24				Grave Creek
	2002	33s8w	2	Bonnie Ridge K	11				Middle Cow Creek
	2002	34s6w	7	Brimstone Return 21E	9				Grave Creek
	2002	33s5w	22	Coyote Creek 2	14				Grave Creek
	2002	32s5w	3	Fortune Branch 1	16				Middle Cow Creek
	2002	32s5w	3	Fortune Branch F	65				Middle Cow Creek
	2002	32s5w	9	Fortune Return 9	8				Middle Cow Creek
	2002	31s4w	6	Galesville Return 3	23				Middle Cow Creek
	2002	31s4w	7	Galesville Return 4	20				Middle Cow Creek
	2002	31s4w	34	Galesville Return 5	13				Middle Cow Creek
	2002	31s4w	3	Galesville Return 6	16				Middle Cow Creek
	2002	31s4w	3	Galesville Return 8	26				Middle Cow Creek
	2002	31s4w	3	Galesville Return 9	10				Middle Cow Creek
	2002	33s4w	15	Grave Ford 8A	65				Grave Creek
	2002	32s4w	7	Koehler Jones 2	9				Middle Cow Creek
	2002	32s5w	8	Lost Fortune 8	7				Middle Cow Creek
	2002	34s4w	7	Lucky Toad 7-B	21				Grave Creek
	2002	34s6w	3	Mackin Gulch 1	34				Grave Creek
	2002	34s6w	3	Mackin Gulch SSC	13				Grave Creek
	2002	32s5w	33	McCollumn Creek 1	56				Middle Cow Creek
	2002	34s5w	15	McCoy Creek 3	55				Grave Creek
	2002	34s4w	7	Pease Overlook 1	8				Grave Creek
	2002	33s5w	35	PP & J 8	13				Grave Creek

	2002	33s5w	26	PP & J 11	16				Grave Creek
	2002	32s8w	23	Riffle Creek 2B	10				Middle Cow Creek
	2002	33s6w	7	Rueben Overlook 2	44				Middle Cow Creek
	2002	33s7w	9	Sawmill Gap 2	6				Middle Cow Creek
	2002	33s8w	1	Sawmill Gap 8	5				Middle Cow Creek
	2002	33s6w	7	Section Creek 2	8				Middle Cow Creek
	2002	34s5w	11	Seven Come Eleven 1	34				Grave Creek
	2002	33s5w	4	Speaker Salvage 1	39				Grave Creek
	2002	33s5w	3	Speaker Salvage 2	15				Grave Creek
	2002	32s4w	3	Thin Horse 6	3				Middle Cow Creek
	2002	32s8w	31	Trappers Cabin C	72				Rogue-BLM Wild Section
	2002	32s9w	17	Walker Return 14	5				Rogue-BLM Wild Section
	2002	32s4w	3	Whitehorse 7	6				Middle Cow Creek
				Total	**817 Acres**				