

USDI, Bureau of Land Management
Three Rivers Resource Area, Burns District
Hines, Oregon 97738

Finding of No Significant Impact and Decision Record

SHED Forest Restoration Project
Environmental Assessment

OR-04-025-038

FINDING OF NO SIGNIFICANT IMPACT

The proposed action is a combination of understory thinning of certain conifers (ponderosa pine and Douglas-fir), cutting of juniper, and aspen treatments. Ponderosa pine/bunchgrass and Douglas-fir/bluegrass communities dominate the project areas of approximately 1,500 acres. Aspen stands are also common in the project areas.

This proposal is in conformance with objectives and land use plan allocations in the 1992 Three Rivers Resource Management Plan (RMP). Based on the analysis of potential environmental impacts contained in the attached Environmental Assessment (EA) and all other information in the project file, I have determined the proposed action and alternatives analyzed do not constitute a major Federal action that would significantly impact the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is not necessary and will not be prepared.

Rationale:

This determination is based on the following: Potential effects to the following critical elements of the human environment have been analyzed in the Three Rivers RMP/Final EIS, and are not known to be present in the project area or affected by enacting either alternative: Wilderness, Wilderness Study Areas of Critical Concern, Wild and Scenic Rivers, American Indian Traditional Practices, Paleontology, Floodplains, Prime or Unique Farmlands, and Hazardous Materials. The following critical element is not discussed in the Three Rivers RMP/FEIS, but is either not known to be present in the project area or affected by enacting either alternative: Environmental Justice. All potentially impacted resources were analyzed in the EA specific to the proposed action and alternatives. The following resources were analyzed in the EA: air quality, water quality, migratory birds, wetlands and riparian, Special Status Species (SSS), noxious weeds, cultural heritage, soils, vegetation, wildlife, fisheries, rangeland management, recreation, visual resources, forestry, fire management, economic and social values, and lands and realty. Impacts to these resources are considered nonsignificant (based on the definition of significance in 40 CFR § 1508.27) for the following reasons:

Air Quality:

The air quality currently meets or exceeds air quality standards outlined by the Oregon Department of Environmental Quality. The proposed action would have only minor and short-term impacts on air quality while the project was being implemented.

Water Quality:

The greatest effects to water quality from this project are likely to be related to the change in vegetation communities following thinning. The proposed action would facilitate recovery of a riparian hardwood community and stimulate regeneration of some riparian species that have become decadent due to fire exclusion (e.g., aspen). With the reestablishment of this community, greater bank stability, increased shading, and greater water storage/retention are expected. These changes typically improve water quality by increasing the sediment storage capacity of riparian zones, reducing turbidity, and reducing water temperature.

Wetlands and Riparian:

By reintroducing wildland fire and mimicking natural processes, vegetation should respond positively. Removing juniper and overstocked pine currently outcompeting riparian vegetation would help reestablish riparian communities throughout the project area. By cutting juniper more water could be captured, retained, and released at a slower rate due to the increased root holding capacity or reestablished riparian vegetation.

Migratory Birds:

The overall net effect of the proposed action would likely be an increase in habitat diversity and an increase in avian species diversity. Direct impacts to migratory birds would be minimized by pile burning in the fall, and cutting and piling in the fall where determined necessary.

Special Status Fauna:

The proposed action is likely to have no effect on any Burns District SSS including bald eagles. The proposed action is in conformance with the Winter Bald Eagle Roosts Habitat Management Plan. Project design features for wildlife species:

- In order to not affect roosting eagles in the Mill Creek roosts area, no work activities would be conducted December 1 through April 15.
- Avoid all mechanical cutting of juniper and pine with old growth characteristics or obvious wildlife occupation (cavities or nests).
- If active raptor nests are encountered during project implementation, work would cease until a wildlife biologist makes a determination of actions needed to ensure the nest and surrounding area remain suitable for the particular species encountered.

Noxious Weeds:

The risk of noxious weed introductions will be minimized by ensuring all equipment is cleaned prior to entry to the site, minimizing disturbance activities, and follow-up monitoring, for at least 3 years, to ensure no new noxious weed establishment. Should noxious weeds be found, appropriate control treatments will be performed in accordance with control measures developed by the Burns District Bureau of Land Management (BLM).

Cultural Heritage:

Cultural surveys have been completed. The proposed action would have no known impacts on cultural heritage as cultural sites will be protected throughout the life of the project, either through total avoidance or site-specific project design features approved by the District archaeologist. Where sites are found, appropriate measures will be taken. No slash piles will be placed over surficial archaeological sites.

Soils:

Minor soil disturbance could occur during project implementation. Increases in surface erosion would be short-lived and would likely decrease thereafter as understory vegetation regenerates.

Vegetation:

Under the proposed action existing vegetation would likely be enhanced. Overall species diversity would increase. Forest health and vigor of the stands would be improved. Understory forbs, grasses, shrubs, and riparian vegetation would likely reestablish and increase to a more historic level. Underburning would remove much of the aboveground portions of understory vegetation. However, most plants present in the existing plant communities are adapted to periodic fire and have the capability to respond positively to disturbance.

Wildlife:

Overall, there is likely to be an increase in wildlife species diversity as a result of implementing the proposed action. However, species favoring juniper woodlands and dense conifer stands may be displaced by the proposed action. Foraging opportunities for big game and other herbivores would increase as understory grasses, forbs, and shrubs reestablish. The proposed action will likely increase the health, vigor, and palatability of winter forage for both deer and elk. Thermal and hiding cover would decrease as a result of the proposed action, but there would still be more than sufficient thermal and hiding cover in the project area.

Fisheries:

There is no known fishery within the project area. The nearest perennial waterway is approximately one-half mile from the project area.

Rangeland Management:

There would be no known adverse impacts to rangeland management activities. Some increased forage and palatability would result from the proposed treatments.

Recreation:

Under the proposed action there may be brief, short-term minimal impacts to recreational activities in the vicinity of the planning area. Smoke and noise generated during project implementation could disrupt recreational activities in the spring and fall seasons. In the long term, recreational activities related to driving for pleasure, big game hunting, and wildlife viewing would be enhanced as habitat function improves over time.

Visual Resources:

Thinning and the burning of slash would create a short-term visual distraction. Long-term effects to visual resources would be positive by the retention of a vigorous and healthy large diameter ponderosa pine forest and the diversity of plant communities on the landscape. Visual management objectives would be met.

Economic and Social Values:

There would be short-term positive effects to the local economy under the proposed action. The proposed action would utilize stewardship or service contracts to reduce biomass in the planning area. The purchase of supplies and equipment necessary for implementation of the proposed action from community merchants would constitute an additional positive economic effect.

Forestry:

Under the proposed action forest health would be enhanced. Growth and vigor of the retained trees would increase. The risk of disease and insect infestation entering and/or spreading through the stand would decrease as growth and vigor of the stand increases. The risk of a stand replacement wildland fire occurring in the stands would be greatly reduced. Project design features include:

- Approximately 40 percent of the forest treatment area will be left for big game thermal and hiding cover.
- If logs are removed from units, removal will take place when the ground is dry or frozen. Minor road relocation or improvements could occur to meet resource needs. Machine piling will take place when ground conditions are dry or frozen. This will be accomplished by stewardship or service contracts.

Fire Management:

All treatments included in the proposed action would reduce fuel loading and help lessen the negative effects of wildland fire. The proposed action would move the Fire Regime Condition Class from a Condition Class 3 (high risk of losing key ecosystem components to fire) to a Condition Class 2 (a moderate to low risk of losing key ecosystem components to fire). The proposed action would lower the risk of stand replacement fire in the project area. Overall, following thinning, the stands should survive any wildland fire event.

Lands/Realty:

The proposed action would significantly reduce the risk of intense wildland fires occurring with extreme rates of spread on the project area. Consequently, the proposed action would reduce the risk of fire entering private property by way of land administered by the BLM. Private property within the project area and in the general vicinity would have some minor short-term negative effects as a result of implementing the proposed action. The private property in the general vicinity of the project area is likely to experience short-term smoke inundations. The smoke would dissipate within a few days or hours of burning.

/signature on file/
Joan M. Suther
Three Rivers Resource Area Field Manager

April 7, 2005
Date

DECISION RECORD

I have reviewed the EA for the SHED Forest Restoration Project, including the comments and responses, the project file, and the documentation of the public scoping, issues identification and alternative development process. Based upon this review, I have decided to implement Alternative A, the proposed action, to thin and follow with slash burning and underburning of approximately 1,500 acres. The treatment areas will vary in size from 40 to 125 acres. Treatments will be conducted over the next 7 to 12 years. Project design features set forth in this decision are designed to ensure that conditions meet the objectives.

- The risk of noxious weed introductions will be minimized by ensuring all equipment is cleaned prior to entry to the site, minimizing disturbance activities, and follow-up monitoring, for at least 3 years, to ensure no new noxious weed establishment. Should noxious weeds be found, appropriate control treatments will be performed in accordance with control measures developed by the Burns District BLM.
- Archaeological, botanical, and wildlife inventories will be done prior to implementation of the proposed action. Where archaeological sites or Special Status fauna or flora are found appropriate mitigation measures will be taken. No slash piles will be placed over surficial archaeological sites.
- Prior to beginning operations requiring fuel tanks or fuel handling at the site, the operator will develop and submit to the authorized officer a spill contingency plan.
- Approximately 40 percent of the forest treatment area will be left for big game thermal and hiding cover.
- If logs are removed from units, removal will take place when the ground is dry or frozen. Minor road relocation or improvements could occur to meet resource needs. Machine piling will take place when ground conditions are dry or frozen. This will be accomplished by stewardship or service contracts.
- In order to not affect roosting eagles in the Mill Creek roosts area, no work activities will be conducted December 1 through April 15.
- All mechanical cutting of juniper and pine with old growth characteristics or obvious wildlife occupation (cavities or nests) will be avoided.
- If active raptor nests are encountered during project implementation, work will cease until a wildlife biologist makes a determination of actions needed to ensure the nest and surrounding area remain suitable for the species encountered.

The following monitoring measures will be implemented as part of the decision, and will be applicable to all fuels treatments throughout the life of the project:

1. Pre and post-vegetation monitoring will be conducted by staff to monitor changes in plant cover, weed invasion, and additional disturbances.

Rationale for Decision

I have decided to implement the previously described actions because they best serve as the basis for a long-term managed fuels reduction plan for the SHED project area that is in compliance with the Three Rivers RMP goals, and in compliance with other applicable laws, regulations, and policies.

The proposed action will substantially reduce risk of short and long-term effects associated with large-scale, high severity wildland fire in the planning area, especially in forested areas or adjacent private and publicly owned forest land. The project area is primarily composed of ponderosa pine, curlleaf mountain-mahogany, and elk sedge. These are generally known as very dry ponderosa pine sites. Basal area (square feet per acre) of 30 to 45 feet² is the suggested stocking level. Other dry ponderosa pine sites within the project area are 50 to 70 feet².¹

The proposed action of thinning from below removes the ladder fuel component, typically composed of sapling and pole-sized trees thereby reducing the density and creating a discontinuity in the vertical profile.² Thinning from below will vary both the number and clumping of remaining trees creating various stand structures and compositions. Small tree removal prescriptions alone do not reduce the crown fire hazard. Reducing canopy density sufficiently may require the removal of some medium sized or co-dominant trees with commercial value.³

Thinning to reduce canopy bulk density reduces the moderating effect of the canopy on windspeed, so midflame windspeed will increase. The increased fuel level windspeed coupled with increased insolation also leads to lower dead fuel moisture in treated stands during the summer. However, properly executed treatments often reduce the crown fire potential. Crown fire mitigation treatments often represent a tradeoff; the decrease in crown fire potential comes at the expense of increased surface fire spread.⁴

In addition, implementation of the proposed action will protect cultural resources, enhance rangeland productivity and wildlife habitat. Impacts on air quality, recreation, soils, noxious weeds, and water quality will be completely avoided or minimized through project design and monitoring. There will be positive effects to local social and economic values.

¹ Cochran, P.H., J.M. Geist, D.L. Clemens, Rodrick R. Clausnitzer, David C. Powell. 1994. Suggested Stocking Levels for Forest Stands in Northeastern Oregon and Southwestern Washington. Res. Note PNW-RN-513. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 21 p.

² Fiedler, Carl E., et al., A Strategic Assessment of Crown Fire Hazard in Montana: Potential Effectiveness and Costs of Hazard Reduction Treatments. PNW-GTR-622. November 2004.

³ Graham, Russell T., et al., The Effects of Thinning and Similar Stand Treatments on Fire Behavior in Western Forests. PNW-GTR-463. September 1999.

⁴ Scott, Joe H. and Elizabeth D. Reinhardt. Assessing Crown Fire Potential by Linking Models of Surface and Crown Fire Behavior. RMRS-RP-29. September 2001.

Other Alternatives Considered but Eliminated from Detailed Study

Alternative C.1 using only prescribed fire to treat the overstocked stands and Alternative C.2 that aggressively treated the project area were considered but not analyzed in detail because they did not meet the purpose and need. Alternative C.1 would use only prescribed fire to treat overstocked stands was not developed because to burn these stands successfully would involve a high level of risk of killing or negatively impacting larger trees and resources the project is designed to protect and enhance. Alternative C.2 which would aggressively treat the project area included substantial commercial harvest, improving existing roads and creating new roads and did not include aspen projects. This alternative was cost-effective but was eliminated because it did not meet the riparian, wildlife habitat, watershed, and hazardous fuels restoration objectives as identified in project.

Public Involvement

A BLM interdisciplinary team of natural resource specialists in fuels, archaeology, wildlife, recreation, riparian, forestry, and rangeland management convened and completed an internal scoping effort. The issues, concerns, and opportunities the specialists identified were used in public involvement.

Public involvement consisted of separate public meetings with the Harney County Court, Grant County Court, Harney County Watershed Council, Southeast Oregon Resource Advisory Council, Harney Soil and Water Conservation District, and included a BLM open house. Other interested parties include the Oregon Department of Fish and Wildlife, Malheur National Wildlife Refuge, United States Forest Service Emigrant Creek Ranger District, Malheur National Forest Supervisor's Office (Region 6), Harney County Chamber of Commerce, and Burns Paiute Tribal Council. A letter announcing the open house meeting at the Burns District BLM was sent to grazing permittees within the project area, as well as landowners with property adjacent to the project area, and others. News releases, inviting the public to the open house, were posted on the Burns District Web site, and sent to 15 newspapers including the local Burns-Times Herald, three radio stations including local station KZZR, and Oregon Public Broadcasting television. The BLM received three public comment forms during the open house, all in support of the project.

The EA was available through posting on the Burns District BLM Web site and a press release was published in the Burns-Times Herald on December 8, 2004.

Conformance with Land Use Plan

The implementation of the proposed action is in compliance with management direction established in the Three Rivers RMP/FEIS (Chapter 2, Wildlife Habitat and Forestry and Woodlands, September 1992), and Winter Bald Eagle Roosts Habitat Management Plan. The proposed action is also in compliance with Federal, State, Tribal, and local laws, regulations, and land use plans.

Administrative Review

This decision is a forest management decision. Administrative remedies may be available to persons who believe that they will be adversely affected by this decision. Persons wishing to seek administrative recourse must do so in accordance with BLM regulations and the procedures and requirements of 43 CFR § 5003 – Administrative Remedies.

In accordance with BLM Forest Management Regulations 43 CFR § 5003.2 (a and c), a notice of decision will be published in the Burns-Times Herald. The publication date of this notice will initiate the 15-day protest period provided for under 43 CFR § 5003.3. If no protests are received, this decision will become effective upon the conclusion of the protest period. If a timely protest of the decision is received, this decision will become effective upon the BLM's completion of its review and response to the protest. Any contest of this decision should state specifically which portion or element of the decision is being protested and cite the applicable CFR regulations.

/signature on file/

Joan M. Suther

Three Rivers Resource Area Field Manager

April 7, 2005

Date