

**EDELWEISS FUELS HAZARD REDUCTION AND THINNING PROJECT
ENVIRONMENTAL ASSESSMENT**

OR134-EA-014



**U.S. Department of the Interior
Bureau of Land Management
Wenatchee Resource Area
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Introduction

The Wenatchee Resource Area of the Spokane District Bureau of Land Management (BLM) is proposing to reduce fuels and thin trees on public lands that BLM administers in the vicinity of the community of Edelweiss. The Edelweiss community is located approximately 8 miles northwest of Winthrop and 3 miles southeast of Mazama, Washington in Okanogan County (Map 1 and 2). Edelweiss residents have expressed concern about the risk of losing their homes to wildland fire since the subdivision is located within a fairly dense forest. The Winthrop area has been identified as a “Community at Risk” under the National Fire Plan. Consequently, a major fuels reduction effort funded by a National Fire Plan grant is already underway on private lands of the community focusing on housing lots and adjacent access road rights-of-way.

Because of the proximity of the BLM lands to ongoing fuel reduction (“Fire Wise”) projects within the subdivision, the Edelweiss subdivision management requested that BLM participate in the overall project. A BLM forester and other specialists made a site visit to consider opportunities to reduce fuels through activities such as thinning of small understory trees, removing large trees to a spacing that would reduce the threat of a large crown fire moving through the area, and reducing patches of brush by chipping or burning. The BLM specialists determined that project activities could be beneficial.

Purpose and Need for the Project

The purpose of the proposed project is to reduce fuel loads on BLM-administered land adjacent to the subdivision. Fuel arrangement is problematical because of interlocking tree crowns as a result of high tree densities. Reducing fuel loads and especially fuel arrangement would minimize the risk of an aggressive wildland fire on BLM lands and its possible spread through tree crowns to the subdivision.

Due to the close proximity of public lands southwest of the main Edelweiss subdivision and prevailing winds, from the southwest, a fire with heavy fuels on BLM property could gain intensity and spread toward the Edelweiss subdivision and threaten homes.

Planning Area and Map

The general project area is a 40-acre parcel in western Okanogan County, Washington (T. 35 N., R. 20 E., Section 4)(see Map 1). It is adjacent to the Edelweiss subdivision on three sides (east, south and west), with U.S. Forest Service property stretching for many miles to the north (Map 2). Approximately 31 acres of the planning area are forested, with the remaining 9 acres comprised of a south-facing hillside supporting mainly

bitterbrush and bunchgrasses. Due to the small size of this public parcel, it has limited management opportunity.

Description of Alternatives

Two alternatives were considered: Alternative 1 (No Action) and Alternative 2 (Proposed Action), both are described below.

Alternative 1 – No Action

This alternative would not harvest trees or treat fuels in the Edelweiss planning area.

Alternative 2 - Proposed Action

The proposed action is to thin merchantable trees (approximately 8 to 20 inch diameter breast height DBH) within the 31 forested acres of the project area to a spacing of about 20 feet, with emphasis on removing diseased or at-risk Douglas-fir. Some Douglas-firs would be retained for diversity, future snags, and forest health reasons. Although a few ponderosa pine trees could be harvested under this alternative, the emphasis would be to retain as many ponderosa pine as possible to provide for historic conditions and a more fire resistant stand of trees into the future. Harvest operations will be completed with ground based mechanical equipment.

Many small diameter non-merchantable trees (less than 8 inch DBH) would be removed to reduce fuel loads in overstocked areas. Where practical, while still meeting the purpose and need of the project, clumps and scattered individuals of small diameter trees would be retained to provide wildlife habitat, reduce visual impacts, and provide for future large trees.

No new roads would be constructed for this harvest, since all areas of the unit are accessible from existing roads. A few small landings (less than .25 acre) would be constructed for the temporary log storage on relatively flat areas (less than 5 percent slope). Many small trees would be hauled to a pulp mill to reduce slash loads in the project area, and most remaining slash would be hand piled/machine piled and burned on landings and at various points throughout the project area.

Burning of the slashed and hand/machine piled vegetative materials would be conducted during time of the year and under weather conditions that account for smoke dispersal and risk of escaped fire.

Noxious weeds would be treated, as needed, using chemical and biological control methods. Noxious weed control would be implemented under guidelines set forth in the Final EIS for Vegetation Treatment on BLM Lands in Thirteen Western States dated July 1991 and the Spokane District Noxious Weed Control Environmental Assessment, and any subsequent updates.

If any threatened, endangered, proposed or special status wildlife or vegetative species are found in the project area during project implementation, all activities would be stopped until the project biologist can complete a biological evaluation.

If any cultural resources are located during project implementation, all activities will be temporarily halted until the project archaeologist completes an evaluation of the new information.

Residents of the Edelweiss Community would be notified of the proposed actions by the project contractor prior to implementing these activities.

The harvest area will be monitored following project activities to determine if tree regeneration is adequate.

Other Alternatives Considered But Not Analyzed in Detail

One alternative dropped from detailed consideration early in the analysis was to remove the mature overstory trees, burn the slash and brush, and plant ponderosa pine and Douglas-fir seedlings. Although these activities would accomplish the purpose and need and return the stand to historic conditions that would be fire safe, the clearcut prescription would reduce scenic values of the area during the growth of the stand. In addition, there are enough healthy trees available to provide for a suitable stand of trees through selective thinning.

Affected Environment and Environmental Consequences

Vegetation, Plant Communities, Special Status Plant Species, Fire and Fuels, Air Quality

Affected Environment

Approximately one-third of the project area consists of a south-facing hillside comprised of the ponderosa pine/antelope bitterbrush/bluebunch wheatgrass community type. The northern portion of the project area is on a small ridge top with a north-facing slope and consists primarily of Douglas-fir habitat types. Bitterbrush, grasses, and scattered ponderosa pine and Douglas-fir trees, dominate much of the south-facing hillside. The top of the hill and the north-facing slope is covered with young to mid-aged ponderosa pine and Douglas-fir trees, with occasional large (greater than 20 inch DBH) ponderosa pine.

Historically, this area had a more open stand of trees, with a more diverse community of grasses, shrubs, and flowering herbaceous plants. A greater percentage of the area was shrub and grasslands with a smaller percentage of the area dominated by forested lands.

Presently, the project area has no large patches of noxious weeds that have potential to increase following ground disturbances.

The air quality of the area is excellent, with no large industrial areas nearby, no large urban areas, no high vehicle traffic, and no extensive farming areas. The major airborne contaminant is likely the smoke from the wood burning stoves of nearby residences.

Environmental Consequences

Alternative 1 – No Action

With no thinning under this alternative, the tree stand density would increase. Some trees would increase in diameter, but growth would be stunted due to reduced light and crowding. Overall stand health in the 40-acre project area would increasingly decline as tree densities increase, while herbaceous plants would continue to decrease in both number and vigor.

Under this alternative, fuel loads from small trees, down wood, and pine needles would continue to build up as some of the existing trees die and additional small trees continue to grow. This build up of fuel would result in an increasing risk for a stand replacement type of fire that would kill most of the existing trees. Such a fire would have a high potential to become a crown fire, which could easily cross the adjacent roads into the nearby Edelweiss subdivision.

Under this alternative, air quality would remain at good quality, except in the event of a major wildfire which could impair air quality for the duration of the fire.

Alternative 2 – Proposed Action

This alternative would result in vegetative conditions relatively similar to historic natural conditions for this habitat type. For example, there would be fewer small to mid-sized trees less than 15-inch DBH, and most of the remaining trees would be more widely spaced and greater than 15-inch DBH.

Wildland fires that could occur in the project area following implementation of this alternative would be of low severity, and the vegetation would quickly recover to pre-fire conditions. Maintaining these conditions in the future through prescribed fire at 10 to 15-year intervals would be a relatively easy management option.

Although they have no nearby sources, weeds could occur in any disturbed soil areas such as skid trails and landings. Because only a small area would be disturbed, this level of weeds would not likely become a problem and would be controlled.

Some piles of slash would be burned under this alternative, which could cause short-term (1 to 3 days) decrease in air quality. An attempt would be made to burn these piles under conditions that dispersed the smoke quickly, but this is not always possible.

Field surveys and data base searches for special status plant species and unique vegetation values did not locate any of these in the project area. The project will not imperil the continued existence of any native plant species or lead to the listing of any

plant as threatened or endangered.

Riparian/Water Resources, Fisheries

Affected Environment

The project area drains toward the Methow River to the south or Fawn Creek to the east. Fawn Creek runs along the eastern edge of the project area across Fawn Creek Road from the project area. Because of the way the run-off is filtered out on flat topography before it could reach the Methow River, it is unlikely that silt from the project area reaches the river except perhaps during a major storm event.

Environmental Consequences

Alternative 1 – No Action

Under this alternative, there would be no effects on water quality or quantity in the future to the Methow River or Fawn Creek. Even in the event of a severe wildfire on the project area, which would increase sediment runoff, most would likely be filtered out before reaching the river.

There would be no effects to any threatened, endangered, proposed, or special status fish or aquatic species as a result of this alternative.

Alternative 2 – Proposed Action

This alternative would potentially increase the water quantity runoff from the project area and could produce some erosion from disturbed areas such as landings and skid trails, primarily located on the top of the hill. This additional water and minor erosion would be local and is unlikely to reach the Methow River, because of the flat topography below the project area. The amount of soil disturbance related to this proposed action is relatively low with no new road construction and only small areas of skid trails and landings.

There would be no effects to any threatened, endangered, proposed, or special status fish or aquatic species as a result of this alternative.

Terrestrial Wildlife Habitat

Affected Environment

Wildlife species observed in the Douglas-fir/ponderosa pine habitats of the project area include mule deer, pine squirrels, and a variety of birds and other wildlife species common to these habitats. No sensitive wildlife habitats, dens, or nest sites were located in the area. No threatened, endangered or special status species were found. Several threatened, endangered and special status species occur in the surrounding mountains (Washington Natural Heritage database, 1998), but these species are unlikely to occur in the project area because they avoid human activity areas and prefer higher elevations and remote locations.

Environmental Consequences

Alternative 1 – No Action

Resulting wildlife habitat conditions in the near future would be similar to present conditions, and wildlife species would change very little. Overtime, there would be a gradual increase in the amount of down wood such as fallen logs from decadent trees, as well as a decrease in shrubs and herbaceous plants due to decreased light in the stands. These factors could eventually reduce the numbers of species that rely on these herbaceous and shrub species such as mule deer and American robins, and cause increased populations of species that prefer dense woods, such as Swainson's thrush.

Alternative 2 – Proposed Action

A biological evaluation prepared for the gray wolf, grizzly, bald eagle, Canada lynx, and northern spotted owl found no effects to these species from proposed project activities. No special status wildlife species have been observed in the area.

Because of the low levels of disturbance associated with this alternative, the proposed action would have no adverse effects on wildlife species. Reserving most of the large trees from harvest and thinning smaller diameter trees would retain enough trees to provide habitat for the wildlife species using the area. Animal species that depend on shrub and herbaceous habitats could have slightly increased populations, whereas species that depend on down logs and dense woodlands could have slightly decreased populations, but these changes would be very small.

Cultural Resources, Native American Values, and Paleontological Resources

Affected Environment

The Edelweiss Project is located in the area traditionally used by the Okanogan, a Salish-speaking people whose descendants are now members of the Confederated Tribes of the Colville Reservation. For millennia this and surrounding areas provided important resources for Native American peoples. Their pattern of land use, as recorded by ethnographers, involved large gatherings to take advantage of anadromous fish runs in major streams during the spring and summer; dispersal to gather upland plant resources in the summer and hunt game in the fall; and residence in villages in sheltered locations during the winter.

Activities in upland areas adjacent to rivers, such as the Edelweiss area, were mostly extractive, leaving little trace on the land; therefore, this is an area of low probability for Native American sites.

Environmental Consequences

Alternative 1 – No Action

There would be no effect on cultural properties under this alternative.

Alternative 2 – Proposed Action

Previous Surveys: A literature review was completed for the project's area of potential effect. This included a review of historical and ethnographic documents and BLM and SHPO cultural databases. Results of this review show that portions of the project area were surveyed in 1984 and 1988. The 1984 survey effort does not meet current BLM survey standards. Twenty acres of the project area were surveyed using Class 3 methodology in 1988. No cultural resources were located during this survey. A follow up survey on 20 acres was conducted in June 2002 to ensure adequate survey coverage. No significant cultural resources were located during this survey.

No known cultural sites would be disturbed by this alternative. Soil disturbance from implementing the proposed fuel reduction activities could uncover previously unknown cultural resources. Provisions are provided in this alternative to stop implementing project activities until an archaeologist can evaluate any found resources. This would reduce the potential for damaging cultural resources.

Recreation and Visual Resources

Affected Environment

Although the Methow Valley immediately to the south of the project area is a popular recreational area, there are few signs that the project area is used for recreation. It is too near the developed Edelweiss subdivision to be attractive to hunters, and there are no open roads into the project area except for the main Fawn Creek Road. The Fawn Creek Road is used by recreationists to access Forest Service property to the north and west of the project area, and there is recreation use on the road for activities such as cross-country skiing, walking and bicycle riding, but little of this use occurs off the road into the project area. There is one Forest Service road that accesses the BLM parcel along the ridge top, but a locked gate closes this road to the public.

Visual views of this area include primarily viewpoints from the Goat Creek Road and Fawn Creek Road. Trees block view of this parcel from Highway 20 and the Methow River. A few houses and housing lots from the Edelweiss community look down on this project area from above or are adjacent to parts of the project area.

Environmental Consequences

Alternative 1 – No Action

Under this alternative, any low levels of recreation that may occur in the project area would continue as at present. No future increase of recreation in the project area is

expected.

Views of the project area would not change as a result of this alternative.

Alternative 2 – Proposed Action

Under the proposed action, no increase or decrease in levels of recreational use of the project area is expected to occur. Existing recreational users may need to adjust temporarily to the disturbance that would be caused by project activities. Depending on the type of recreation that may be occurring in the area, soil disturbance such as the skid trails and landings caused by heavy equipment could make the project area somewhat less scenic for a few years until the disturbed areas are revegetated, but this level of disturbance is small and would not likely be a major concern to recreationists in the area. No new roads would be constructed so no additional access to the area would be created to attract additional recreation use.

Under this alternative, some areas of soil disturbance and tree stumps may be visible from viewpoints on the Goat Creek Road, Fawn Creek Road, and housing areas in the Edelweiss subdivision. There would be enough trees remaining to provide a forested view of the project area, and from most angles, a decrease in tree density would not be noticeable.

Other Resource Elements Considered in the Analysis

Environmental Justice: There would be no disproportionately high and adverse human health or environmental effects on minority or low-income populations as a result of implementing either the proposed or the no action alternative.

Social, Cultural, Economic: Under the proposed alternative, risk of a fire starting in the project area and spreading into the surrounding Edelweiss subdivision would be relatively low. Crown fire spread within the BLM property would be less likely, which would reduce the potential for spot fires crossing the surrounding roads.

Contract work under the proposed alternative would provide economic benefits to the local community.

Other Values: The following resources were considered in this analysis, but determined to be either not present or not expected to be impacted:

- Wild and scenic rivers
- Floodplains
- Prime/unique farmlands
- Special area designations
- Wilderness
- Hazardous/solid materials
- Energy and minerals resources or their development

Coordination and Consultation

The proposed fuels hazard reduction and thinning project has been coordinated with local fire districts, and Edelweiss Subdivision management, representing the residents of the subdivision.

The proposed project was coordinated with the following BLM specialists:

Wenatchee Resource Area:

- Kevin Kane - Botanist
- Diane Priebe - Recreation Planner
- Jim Rees - Wildlife Biologist
- Joe Kelly – District Fisheries Biologist
- Jim Rees – Wildlife Biologist

Spokane District

- Anne Boyd - Archaeologist
- Kathy Helm - Planning and Environmental Coordinator
- Scott Boyd – Fire Management Officer
- Ron Fritsch – Fire and Fuels Technician
- Clarke Johnston – Forestry Technician

Border Resource Area

- Al Gardner – Forester

Consultation has been initiated with the following:

- Confederated Tribes of the Colville Reservation
- Office of Archaeology and Historic Preservation

In an attempt to locate any traditional cultural properties or sacred sites in the project area, a consultation letter was sent to the Confederated Tribes of the Colville Reservation during the week of May 16, 2002. Consultation has also been initiated with the State Office of Archaeology and Historic Preservation. No concerns regarding cultural resources or sacred or spiritual sites have been expressed.

Outreach

The EA will be placed on the Spokane District Webpage at www.or.blm.gov/spokane for public review with a 2-week comment period, to end July 16, 2002.