

Bald Fire Salvage and Restoration Project

Recreation & Visual Quality Resources



**Prepared by:
Tamera Taylor
Recreation Officer**

June 10, 2015

Table of Contents

Introduction.....	3
Management Framework.....	3
Recreation.....	3
Visual Resources.....	4
Impacts Relevant to Recreation and Scenery.....	6
Affected Environment.....	6
Existing Condition.....	7
Management Direction.....	7
Environmental Consequences.....	8
Spatial and Temporal Context.....	8
Connected Actions, Past, Present, and Foreseeable Activities.....	8
Effects Analysis.....	9
Alternative 1.....	9
Alternative 2.....	15
Alternative 3.....	16
References.....	18
Tables	
Table 1: Prescriptions for Recreation.....	3
Table 2: Prescriptions for Visual Resources.....	5
Maps	
Map 1: Visual Quality Objectives for the Reading Reforestation and Restoration Project.....	14

Introduction

The purpose of this analysis is to examine the existing Recreation and Visual Resources within the Bald Fire Salvage and Restoration Project (Bald Project) area and investigate how these resources may be affected by the proposed actions in regards to issues and consistency with the Lassen National Forest Land and Resource Management Plan (LRMP) standards and guidelines.

Management Framework

Recreation and Visual Resources are managed under the 1992 *Lassen National Forest Land and Resource Management Plan*, as amended. The Bald Project is located in Management Area #5 (Ladder). The Project area falls under the A (Non-Timber Wildlife, B (Range/Wildlife), F (Fish), K (Rocky/Sparse Timber Production), and T (Timber).

Recreation

Listed below are the applicable Forest Goals (LRMP 4-4) as well as the associated Forest Standards and Guidelines for Recreation (LRMP 4-24 & 4-25):

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
 - Manage recreation according to the Recreation Opportunity Spectrum (ROS) classes described in the ROS User's Guide (described below).
 - Remove hazard trees in developed recreation sites, and along roads and trails.
 - During project analyses, identify dispersed campsites. Near those identified, maintain natural-appearing timber stands meeting a visual quality objective of Partial Retention.
- Provide diverse opportunities for off-highway vehicle recreation.
 - Mountain bike and OHV use is allowed in all areas not specifically closed to protect other resource values.

Table 1 – Prescriptions for Recreation

Prescription	Standards & Guidelines
<i>A – Non-Timber Wildlife</i>	<ul style="list-style-type: none"> • Provide opportunities for viewing wildlife, hunting, gathering forest products, and vehicle camping. • Manage recreation according to the specified Recreation Opportunity Spectrum Classes.
<i>B – Range/Wildlife</i>	<ul style="list-style-type: none"> • Manage recreation according to Recreation Opportunity Spectrum Class of Roaded Natural.
<i>F – Riparian/Fish</i>	<ul style="list-style-type: none"> • Confine off-highway vehicles, except over-snow vehicles to designated roads, trails, and stream crossings in riparian areas.
<i>K – Rocky/Sparse Timber</i>	<ul style="list-style-type: none"> • Manage Recreation according to the Recreation Opportunity Spectrum classes of Semi-Primitive Non-Motorized or Roaded Natural.
<i>T – Timber</i>	<ul style="list-style-type: none"> • None

Recreation Standards & Guidelines for Management Area #5 – Ladder

Manage the undeveloped camping area at Bald Mountain Reservoir as a dispersed campsite.

Recreation Opportunity Spectrum (ROS)

The Recreation Opportunity Spectrum (ROS) is a system for classifying and managing recreation opportunities based on the following criteria: physical setting, social setting, and managerial setting. The ROS classes for the Eiler Project area are *Roaded Natural and Semi-Primitive Non-Motorized*. Appendix J of the LRMP describes these classes as:

Roaded Natural:

The area is ½ mile or less from roads and trails open to motorized use. Resource modifications and utilization practices are evident, but harmonize with the natural environment. Roads may be Maintenance Levels 2 to 5. Recreation sites may be Development Level 2 to 4. The social setting provides for moderate to high frequency of contact on roads and low to moderate frequency on trails away from roads. Capacity ranges from 10 to 20 RVDs[◇]/acre/year. On-site user controls are noticeable, but harmonize with the natural environment. Typical activities include, but are not limited to: hiking, cross-country skiing, downhill skiing, power boating, snowmobiles, OHV touring, trailer camping, hunting, and fishing. The compatible visual quality objectives are Partial Retention or Modification.

◇ Recreation Visitor Days (RVDs) equals 12 hours of recreation use by one person or any combination thereof that equals 12 hours.

Visual Resources

Applicable Forest Goals (4-5) and associated Standards and Guidelines (LRMP 4-31) state that planning for Visual Resources should:

- Throughout the Forest, maintain visual quality commensurate with other resource needs. Adopt and apply specific Visual Quality Objectives (VQOs) for all areas of the Forest.
 - Meet or exceed VQOs identified on the “Adopted Visual Quality Objective Map” or in the prescriptions and Management Area Direction. To meet Retention and Partial Retention VQOs, use additional guidelines listed in the View/Timber prescription (4-73 – 4-75). To meet Modification and Maximum Modification VQOs, use additional guidelines given in the Timber Prescription (4-71 – 4-72).
 - Keep VQOs compatible with ROS classes as specified.
 - Vegetative treatments should be designed to blend as much as possible with the characteristic landscape.
 - Road construction and other earthwork should be designed to minimize cuts and fills. Areas of bare soil should be re-vegetated by natural or artificial methods.
- Where past management activities do not meet adopted visual quality objectives, use visual rehabilitation to return visual quality to an acceptable level.

- If adopted VQO's cannot be met for management activities in response to fire, insect and disease attack, or other catastrophic event, then assess and document any such deviation in a site-specific environmental analysis.

Table 2 – Visual Resource Prescriptions

Prescription	Standards & Guidelines
<i>A – Non-Timber Wildlife</i>	<ul style="list-style-type: none"> • In area with an adopted VQO of Retention or Partial Retention, visually blend vegetation manipulation (such as prescribed burns) into the surrounding landscape.
<i>B – Range/Wildlife</i>	<ul style="list-style-type: none"> • In area with an adopted VQO of Retention or Partial Retention, visually blend vegetation manipulation (such as prescribed burns) into the surrounding landscape.
<i>F – Riparian/Fish</i>	<ul style="list-style-type: none"> • Meet a VQO of Retention or Partial Retention within the foreground as viewed from Sensitivity Level 1 streams and lakeshores, as designated on the Adopted Visual Quality Objective Map. • Employ the guidelines for these VQO's as listed in the View/Timber Prescription, Visual Resources Section.
<i>K – Rocky/Sparse Timber</i>	None
<i>T – Timber</i>	<ul style="list-style-type: none"> • Meet VQOs of at least Modification and Maximum Modification, as specified on the Adopted Visual Quality Objectives Map. • Apply these guidelines to meet the VQO of Modification. <ul style="list-style-type: none"> ○ Management activities may dominate the landscape. ○ Vegetative alterations will be within the scale of the surrounding area or characteristic landscape. ○ Vegetation alterations will borrow from natural form, line, color, or texture so completely that it resembles the surrounding area or characteristic landscape. ○ Design openings to avoid straight, geometric lines and to borrow form and size from natural openings. ○ Avoid disruption of the continuous skyline. • Apply these guidelines to meet a VQO of Maximum Modification. <ul style="list-style-type: none"> ○ Management activities may dominate the characteristic landscape. ○ Vegetative alterations may be out of scale with their surrounding natural landscape when viewed as foreground or middle-ground. ○ Vegetative alterations may not completely borrow from natural form, line, color, or texture when viewed as foreground or middle-ground. However, when viewed as background they must resemble the surrounding area or characteristic landscape. ○ Design openings to avoid straight geometric lines and shapes. ○ Avoid disruption of the continuous skyline.

Visual Resource Standards & Guidelines for Management Area #5 – Ladder

None applicable

Visual Quality Objectives

Visual Quality Objectives (VQOs) are standards for the visual management of all Forest lands. There are two VQOs covered by this Project: Modification and Maximum Modification.

Modification (M) - Management activities may dominate the original landscape. However, activities of vegetative and land form alteration must borrow from naturally established form, line, color, or texture so completely, and at such a scale, that its visual characteristics are those

of natural occurrences within the surrounding area of character type. Reduction in form, line, color, and texture contrast to meet modification should be accomplished in the first year.

Maximum Modification (MM) – Management activities of vegetative and landform alterations may dominate the characteristic landscape. However, when viewed as background, the visual characteristics must be those of natural occurrences within the surrounding area or character type. When viewed as foreground or middle-ground, they may not appear to borrow from naturally established form, line, color, or texture. Alterations may also be out of scale or contain detail that is incongruent with natural occurrences as seen in the foreground or middle-ground. Reduction of contrast to meet maximum modification should be accomplished within five years.

Impacts Relevant to Recreation and Scenery

- The effect of proposed actions on activities experienced at the various recreation sites and facilities within the project area.
- Compatibility of proposed actions with established recreation (ROS) and visual resource (VQO) objectives for the affected areas.

Issue Indicators

Indicator measures are intended to address how each alternative as the sum total of its proposed actions conforms to the Forest Plan. Measurement indicators will focus on effects or impacts relevant to recreation and scenery according to the Forest Plan standards and guidelines.

Recreation

Measurement Indicator 1: Effects to Dispersed Recreation Sites, Trails, and Activities

Analyzes how the proposed actions affect the use, availability, and quality of the recreation activities available within the project area.

Measurement Indicator 2: ROS Consistency with the LRMP

Comparison of the Recreation Opportunity Spectrum class with the types of vegetative treatment proposed per alternative followed by disclosure of any potential change.

Visual Resources

Measurement Indicator 1: VQO Consistency with the LRMP

Comparison of Visual Quality Objective classes within the project area, the types of vegetative treatment proposed per alternative, and disclosure of potential change.

Affected Environment

Lassen National Forest lies at the crossroads where the Sierras, the Cascades, the Modoc Plateau, and the Great Basin all come together in a fusion of mountains, canyons, forests, lakes, streams, and high desert plains. The diverse landscape and beautiful scenery sets the stage for a multitude of year around recreational activities such as camping, hiking, fishing, hunting, horseback riding, off highway vehicle excursions, caving, hang gliding, and winter sports.

The 31,324 acre Bald Project lies approximately 14 miles southeast of Fall River Mills, California in the Bald Mountain-Pit River, Negro Camp Gulch, and Beaver Creek Watersheds. It is identified in the LRMP as Management areas #5 – Ladder. The Recreation Opportunity Spectrum classification for this area is Roaded Natural. The Visual Quality Objectives are Modification and Maximum Modification.

Recreational activities in the area include dispersed camping, hunting, scenic driving, OHV use, and horseback riding. The area also supports firewood cutting.

Several main travel routes, including County Road 111 and NFS 35N10 (22 Road), pass through the fire perimeter. The Lassen Backcountry Byway follows the 22 Road through the Project Area. Multiple routes designated under 36 CFR 212.51 for motor vehicle use are within the project area. These routes are very popular for hunting, OHV use, and horseback riding.

Existing Condition

The Bald Fire burned in a mosaic pattern. Areas of low, medium, and higher severity burn are comingled resulting in a patchwork of dead, blackened, and green trees. Approximately 80 percent of the fire resulted in a moderate to high burn severity. The area is primarily forested in natural stands and pine plantations with occasional brush fields, sage flats, and rocky outcroppings. The vegetation type is characterized as eastside pine with ponderosa pine, Jeffery pine, grey pine, incense cedar, sugar pine, juniper, and white and black oak. Brush species include bitterbrush, wax currant, rabbitbrush, and big sagebrush.

Although 20 percent of the fire area burned at lower severities, large swaths of fire-killed trees and denuded understory exist throughout the project area. The visual quality in these areas no longer exists in the traditional sense (e.g. that green trees would be maintained as the dominant visual feature). The fore and middle ground landscape has been completely altered. There is some residual background scenery, but, in many areas, the landforms block the background views. The open sight lines in the fore and middle grounds reduce opportunities for seclusion and may encourage intrusion or cross country travel by OHVs.

Damaged and fire-killed trees exist along the roads creating a safety risk for both the public and Forest Service employees and contractors. Several main travel routes pass through the areas of highest mortality. These routes, including the Lassen Backcountry Byway, access recreation use areas as well as private lands. These roads are used most of the year, but show an increase in use during the summer and fall recreation seasons.

Management Direction

The LRMP, Chapter 4, Management Direction (4-2) states that “About 53 percent of the Forest is available and suitable for timber production...Timber lands managed less intensively for timber production will emphasize other resource objectives, such as wildlife habitat and/or visual quality...Recreation facilities are well maintained and are sufficient to handle the increased demand. Wilderness, semi-primitive, Wild and Scenic Rivers, Special Interest Areas, and other special areas are managed to provide generally primitive recreational experiences while maintaining healthy natural ecosystems.”

Goals for achieving the desired condition for Recreation include:

- Provide a wide range of outdoor recreation opportunities to meet public demand by furnishing different levels of access, service, facilities, and information.
- Provide diverse opportunities for off-highway vehicle (OHV) recreation.

Goals for achieving the desired condition for Visual Resources include:

- Throughout the Forest, maintain visual quality commensurate with other resource needs. Adopt and apply specific visual quality Objectives (VQOs) for all areas of the Forest.

Environmental Consequences

Spatial and Temporal Context for Effects Analysis

Recreation

Effects to recreation are generally short term in nature. Travel routes and recreation areas are affected mostly by temporary delays, closures, or restrictions due to operations in and around their vicinity. Associated sights, sounds, and smoke from such activities can affect the recreational experience of people in areas adjacent to those being treated. The time required to treat an area by mechanical means that causes the types of effects described varies. Past practices on the Forest suggest that such effects can range from one to several months, depending on the weather. No long term effects are anticipated – that is, effects as described above lasting more than several months to a single treatment area at a time.

Visual Resources

Effects to visual resources can be both short and long term. Observation of past salvage and reforestation projects on the Lassen National Forest suggest that the range for short term effects is typically 1-3 years. This represents the time required for all aspects of treatments to be performed which include actual cutting, site preparation, and planting. Long term effects refer to the visual result of activity approximately 3 or more years after completion and are associated with “green up”. That is, a period of vegetation recovery that is sufficient enough to allow the landscape to effectively mask visual signs associated with disturbances such as stumps left from cut trees, track and tire imprints, blackened ground caused by burning, and imprint of closed and re-vegetated temporary roads.

Connected Actions, Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

The cumulative effects area for recreation and scenery resources lies within the Bald Project boundary. It is a well-established dispersed recreational area on the Hat Creek Ranger District. Visitors utilize the network of roads and trails for scenic driving, OHV travel, hunting, riding, and firewood gathering.

Past Activities

- Wildfires of various scales
- Vegetation treatments

- Wood cutting
- Dispersed campsites
- Road system maintenance

Present Activities

- Vegetation treatments
- Fuels treatments
- Wood cutting
- Dispersed campsites
- Pedestrian and equestrian use
- Off-Highway Vehicle use
- Road system maintenance

Reasonable Foreseeable Activities

- Vegetation treatments
- Fuels treatments
- Wood cutting
- Dispersed campsites
- Pedestrian and equestrian use
- Off-Highway Vehicle use
- Road system maintenance

Effects Analysis

Alternative 1 – Proposed Action

The forest proposes to implement a combination of vegetation treatments within the Bald Fire to meet the purpose and need.

- Hazard Tree Removal – Trees within 150 feet of maintenance level 2 and 3 National Forest system roads and along the Burlington Northern-Santa Fe railroad easement would be felled and removed. These trees would be removed or left in place, depending on access. Sub-merchantable trees and non-merchantable hazard trees would be felled and left in place, or piled and the piles burned, depending upon the amount of surface fuel loading present.
- Area Salvage Harvest – Fire-killed and fire-injured trees within the Bald Fire perimeter would be harvested. Merchantable trees would be removed as sawlogs. Non-merchantable trees would be removed as biomass, masticated, felled and lopped, machine piled and burned, or broadcast burned.

Salvage harvest operations would utilize ground-based, mechanical harvesting for treatment on slopes ≤ 35 percent. Hand felling would be used on slopes > 35 percent. Activity-generated fuels would be broadcast burned or piled and the piles burned.

- Area Fuel Treatments – In areas where timber does not meet merchantability standards, biomass removal, mastication, felling and lopping, machine piling and burning, or broadcast burning would be used for hazard removal, fuels reduction, and site preparation. On slopes ≤ 35 percent, ground based mechanical harvesting would be used. On slopes > 35 percent, hand operations would be used. Activity-generated fuels would be broadcast burned or piled and the piles burned.
- Reforestation – Reforestation would be implemented on approximately 12,200 acres within the project area. Prior to planting, concentrations of activity-generated fuels and sub-merchantable trees would be removed using machine or hand cutting and piling followed by pile burning, mastication, or broadcast burning. In addition, sprouting shrubs and vegetation may be treated using manual or mechanical methods such as grubbing, mastication, or use of brush cutters. Ripping may be done prior to planting.

Planting strategies proposed for reforestation include conventional planting, founder stands, cluster planting, and natural regeneration. Natural regeneration is a reforestation strategy that would be used in areas where live trees remain on site or in the adjacent areas, areas dominated by montane chaparral, juniper, or are economically or technically infeasible, and in retention islands. Tree species would include Jeffrey, ponderosa, western white, or sugar pines, as well as Douglas fir, and incense cedar. Hardwood trees would be encouraged and promoted.

At least one release treatment using manual or mechanical methods such as hand grubbing, mastication, or brush cutting to control competing vegetation would be conducted within one to three years. A second treatment would occur within two to five years of planting. Animal control actions such as protective barriers or trapping may be used.

- Roads – Where possible, the existing forest transportation system would be utilized to provide access to treatment units. National Forest System roads used for haul would receive pre-, during-, and/or post-haul maintenance as needed. A dust abatement plan would be included to control wind-caused erosion from road use.

Approximately 2.2 miles of non-system roads would be added to the NFTS as ML2 roads. Up to 1 mile of temporary road may be constructed to access proposed treatment areas. Following implementation, these roads would be decommissioned.

Two water sources, Halls Flat (T33N R6E, N $\frac{1}{2}$ sec. 1) and Bidwell Pond (T34N R4E, S $\frac{1}{2}$ sec. 1), have been approved for this project.

Integrated Design Features (IDFs)

Recreation and Visual quality resources are managed in accordance with the Recreation Opportunity Spectrum (ROS) and Visual Quality objectives (VQOs) as stated in the Lassen

National Forest LRMP. The following IDFs have been incorporated into the project to minimize impacts to recreation opportunities, to mitigate visually unappealing landscape scenes during the vegetative recovery period where treatment is seen, and to ensure the affected environment continues to meet prescribed ROS and VQO setting descriptions.

Recreation and Visual Quality

1. The Lassen Backcountry Byway would be protected during operations.
 - Informational signs would be posted in advance of project implementation.
 - Cut tree marking would be applied within 150 feet of the Byway in areas where residual green trees are greater than 50 percent.
 - Operations-created slash within 50 feet of the Byway would be piled, and piles burned or removed within one-year post treatment. In areas where residual green trees are greater than 50 percent, piles would be located a minimum of 50 feet from the edge of the Byway.
 - In salvage units, trees removed within 50 feet on either side of the Byway would leave a maximum eight-inch stump.
 - Equipment crossings of the Byway would be limited to designated crossings. The trail tread would be restored at crossings.
2. Within areas with the recreational opportunity spectrum (ROS) designation of semi-primitive, non-motorized (SPNM), impacts of mechanical treatment would be minimized.
3. In areas of high recreational use, some vegetation, where available, would be left along the edge of trails and roads. Residual vegetation can act as a visual barrier to discourage future unauthorized routes.

Direct & Indirect Effects

Recreation

Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities

Recreation

Removal of snags throughout the project area would reduce the risks to the recreating public. The National Forest System (NFS) roads in this area are heavily utilized by the public for travel and recreational uses including: hunting, fishing, hiking, camping, woodcutting, and sightseeing.

Effects for recreation are generally localized to specific areas during the implementation time frame so changes in the overall ability for the public to participate in recreation opportunities are considered to be minor. Access along roads may be interrupted or delayed for brief periods during implementation of the proposed treatments, most notably during tree removal. Public use may be limited if short term closures occur. No recreation facilities are proposed to be closed as a result of this alternative so overall opportunity is unaffected and no long term effects are anticipated.

Smoke and heavy equipment used in mechanical treatments may temporarily affect the sights, sounds, smells, and other physical and social qualities (collectively hereafter, qualities) that make recreation areas/routes desirable for use. Contractors and Forest Service personnel working in the vicinity of roads and trails may detract from the sense of separation or solitude. Overall, these effects are considered short term and do not represent the finished project which is a mosaic of treatment and non-treatment areas leading to a diverse and reforested landscape.

It is unlikely that hunting and wildlife viewing opportunities will be affected by implementation. Lack of vegetation and cover, as a result of the fire, has displaced some wildlife, but these species will likely return over time as grasses, forbs, and brush come back. Reforestation will speed up the recovery time for cover provided by large-tree canopy. Utilization of multiple reforestation methods will result in a diversity of canopy structures which may actually increase wildlife encounters.

Recreational Access

Removal of roadside hazard trees will improve public safety and reduce instances of blocked routes due to fallen trees. Treatment of activity-generated surface fuels will reduce the risk of subsequent wildfire starts from the roadway. The Forest Standards and Guidelines (LRMP 4-24 – 4-25) directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” The Removal of Danger Trees along Roads proposed in this alternative is consistent with this direction.

Several primary and secondary routes are in direct proximity to treatment areas. The proposed treatments should have no effect on the amount of recreation opportunities available in the long term, but can have effects on the quality of experience for some Forest visitors on the short term. Temporary road closures, re-routing, smoke, and noise are some of the short term effects that can be anticipated. Effects are site specific and should only affect a small percentage of routes at a time as the Project is implemented.

Several main travel routes, including County Road 111 and NFS 35N10 (22 Road), pass through the fire perimeter. The Lassen Backcountry Byway follows the 22 Road through the Project Area. Multiple routes designated under 36 CFR 212.51 for motor vehicle use are within the project area. These routes are very popular for hunting, OHV use, and horseback riding.

It is likely that use by equipment and hauling during treatment would occur on some or all of these routes. Although road maintenance is proposed and a dust abatement plan would be in place in this alternative, sounds, smells, and fugitive dust may be noticed by users and equestrians during implementation. Increased traffic could be a concern for motorists and equestrians, but over time, visitors would likely become aware of alternate routes to reduce interactions with logging operations.

Up to 1 mile of temporary road may be constructed for access and then decommissioned and rehabilitated after all treatments have been implemented. Sounds of road construction may be perceived, but, such effects are expected to be minimal and short term in nature. Heavy equipment used during the proposed construction and decommissioning of roads may temporarily affect the qualities that make recreation areas and routes desirable for use.

Approximately 2.2 miles of existing non-system routes would be upgraded to standard and added to the NFS system as ML2 roads. Reclassification of these roads will not change the recreation opportunity as they did not exist as legal driving routes before or after the proposed actions. These routes are currently closed to motor vehicle use. Adding them to the system does not affect access opportunity.

Measurement Indicator #2 – ROS Consistency with LRMP

Effects associated with ROS pertain to how recreation settings will be affected once project implementation is completed – not during the process. This Project moves toward a forest that better meets its natural forested condition and provides for better protection against severe wildfires. No changes to the existing ROS classifications are anticipated with this alternative.

The Forest Standards and Guidelines (LRMP 4-24 – 4-25) directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” The removal of hazard trees along roads and the railway easement proposed in this alternative is consistent with this direction.

Visual Resources

Measurement Indicator #1 – VQO Consistency with LRMP

Although the Bald Fire burned in a mosaic fashion, of the 31,324 acres burned on NFS lands, approximately 25,000 were burned under moderate or high severity. In high severity burn areas, the landscape has been dramatically altered. It is unlikely that VQOs can be met in the traditional sense (e.g. that green trees would be maintained as the dominant visual feature). The desired visual conditions under this alternative are “landscapes dominated by site-appropriate trees with variable densities and structure that provide diverse wildlife habitat and forest products” as well as “ecological services that benefit the local community”. Reforestation of severely burned areas would expedite the re-establishment of forested areas, improve visual quality, and provide a mixture of vegetation types and age classes. By treating the slash and surface fuels through piling and burning, vegetation will occur that provides visually pleasing contrast to surrounding features and landforms. The overall result of the proposed treatments will be an improved visual quality. The majority of what can be perceived as negative effects to the visual resource occurs during implementation. While the treatments are being carried out, seeing control lines, treatment edges, ground disturbance, and untreated slash is expected in the foreground distance zone. Scenes of treatment during this initial implementation phase do not represent a completed treatment; effects to scenic quality are based on completed treatments. This initial treatment appearance is short term in duration.

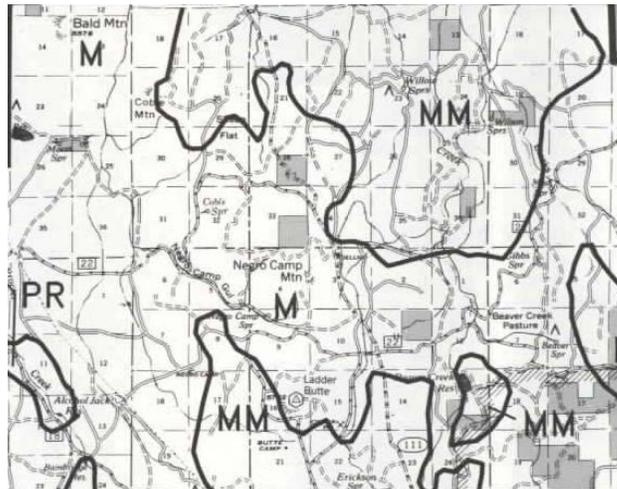
At the conclusion of treatment, visual signs of activity (i.e., cut stumps or track and tire marks on the ground) may still be evident in the short term but are anticipated to remain characteristic to the landscape. Evidence of burning on trees and various ground features may be prevalent, but such sights are naturally occurring in forests where wildfire regimes are common. When growth of shrubs, grasses, and forbs is underway, the majority of evidence left behind by management activities is not anticipated to be evident to the casual forest visitor.

Hazard tree removal treatments that occur throughout the project area will alter the appearance of the immediate foreground. Stumps will be visible initially, but will become less obtrusive as “green up” occurs. Reforestation along the roadways would be consistent with the surrounding areas to blend treatment lines from the fore to middle ground.

The majority of the treatment areas fall under a VQO of Modification (management activities may dominate but must borrow from the characteristic landscape). The mosaic nature of the fire has left patches of unburned and low severity burned areas within the project boundary. These islands, geologic features, and differing treatment types will allow variation and incorporate natural landscape characteristics.

The rest of the Project falls under a VQO of Maximum Modification (management activities may dominate the characteristic landscape). The treatments in these areas would also integrate with the natural landscape. The mosaic nature of the fire and the variety the proposed treatment types would carry across VQOs.

Map #1 – Visual Quality Objectives for Bald Fire Salvage and Restoration Project



Cumulative Effects

Although there may be some decrease in use in the short term, recreation activities would likely continue in the Project area. The management activities proposed under this alternative, along with those already listed under the Connected Actions listed above, would result in some short term effects of noise, traffic, and smoke associated with treatment activities. Some temporary and short-term displacement of recreationists during the time when treatment occurs can be anticipated. Standards and guidelines are in place to minimize effects of the project on recreation and scenic resources. Vegetative treatments and road building and decommissioning associated with this Project and past, present, and foreseeable activities already listed would have no cumulative effects to recreation resources and overall recreation opportunities. Effects from the proposed treatments, especially since they vary in size and space and occur within a disturbed area, will seem minimal in comparison to the disturbance of

the Bald Fire itself. Over the long term, the proposed treatments will improve the visual impacts from the fire.

Alternative 2 – No Action

Alternative 2 would result from a decision not to implement the Bald Project. This alternative would not achieve the purpose or address the need of the project.

The no action alternative provides a baseline for comparative analysis of the action alternatives. Although there would be no action to treat vegetation or fuels under this project, other activities in the area such as road maintenance, fire suppression, firewood cutting, dispersed camping, and other recreational activities would continue. Hazard trees along roads could be felled and left in place as per direction in the LRMP.

Direct & Indirect Effects

Recreation

Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities

Recreation

Under the no action alternative, hazard trees representing an imminent threat along roads and trails could be felled for public safety as directed in the LRMP (4-24 – 4-25). Due to the sheer number of roadside hazard trees and the amount of available personnel, safety road closures may be put in place until hazards can be removed. Downed trees may partially or fully block roads. This would reduce or deny access for hunting, camping, OHV riding, and firewood cutting. Blocked routes may encourage cross-country travel and resource damage as vehicles attempt to drive around the blockages. Pedestrians and equestrians may move farther into unsafe, burned areas to circumvent downed trees.

Alternative 2 would not change the present road related experience (i.e., access or opportunity for driving) as the effects associated with the implementation salvage harvest, fuels reduction, and reforestation treatments would not occur. Users would continue to notice a mosaic of charred, blackened, and green trees. The physical experience of the post-fire environment would remain unchanged. Existing ground fuels along with those associated with the cut trees would continue to accumulate along the roadway. The potential for subsequent fires would be increased.

Access and opportunity for recreation would not be affected, but, some uses may decline under this alternative. In studying the effects of fire on recreation demand in Montana, Hesseln, Loomis and Gonzalez-Caban (2004) found that as burned area increased and the amount of burned area viewed increased, recreation demand decreased suggesting size and extent of burns affect visitation. Taylor and Daniel (1984) found that camping was the recreational activity most affected by severe fire.

Recreational Access

In this Alternative, no roads will be constructed or added to the transportation system. There would be no changes to access. The mere presence of existing non-system routes does not

change the recreation opportunity as they do not exist as legal driving routes. There would be no road maintenance outside that which is regularly scheduled.

Measurement Indicator 2: ROS Consistency with the LRMP

No action as proposed in Alternative 2 would not change or alter the ROS classifications as they currently exist. Recreation Visitor Days may decrease, but this would not necessarily change the determination for a *Roaded Natural* classification.

Hazard tree felling is consistent with direction in the LRMP (4-24 – 4-25).

Visual Resources

Measurement Indicator 1: VQO Consistency with the LRMP

Alternative 2 would result in no immediate change to the existing condition. Swathes of blackened and fire-killed trees would remain in the fore and middle ground along with smaller patches of unburned vegetation. No variations in treatment would occur except at Project boundaries. Untreated areas and debris may delay natural regeneration of vegetation and would increase the potential for subsequent fires.

Alternative 2 would result in no immediate change to VQOs within the project area. The Bald Fire dramatically changed the appearance of the landscape, and VQOs can no longer be met in the traditional sense (e.g. that green trees would be maintained as the dominant visual feature). The quality of scenery would change over time, as vegetation continues to grow and become dense. Within the burned area, favorable landscape views such as topography and other natural features would be visible from roads for the long term. The desired visual condition of “landscapes dominated by site-appropriate trees with variable densities, listed in the Purpose and Need for this project, would be delayed.

Cumulative Effects

There would be no action to treat vegetation or fuels under this project, other activities in the area such as road maintenance, fire suppression, firewood cutting, dispersed camping, and other recreational activities would continue. Hazard trees along roads could be felled and left in place as part of road maintenance as directed in the LRMP.

Road maintenance activities have the potential to limit access at the time and place they occur, but overall, are beneficial to recreation in the access it provides and user comfort it brings to the driving and sight-seeing experience. Wildfires can affect scenery resources for years into the future depending on soils, aspect, and vegetation species composition. A study by Vaux, Gardner, and Mills (1984) on the impact of fire on forest recreation suggests higher intensity fires had negative effects on recreation values but also caution that the impact of fire was not always negative among their respondents, and preferences of recreationists change over time.

Alternative 3 –Hazard Removal Only

Under Alternative 3, commercial sized hazards would be removed along ML2 and higher roads. Sub-merchantable hazards would be felled and left in place or piled and burned. No other actions would occur in the fire perimeter.

Measurement Indicator #1 – Effects to Recreation Sites, Facilities, and Activities

Recreation

Effects for recreation are generally localized to specific areas, in this case the roadside corridors, during the implementation time frame so changes in the overall ability for the public to participate in recreation opportunities are considered to be minor. Access along roads, including the Lassen Backcountry Byway, may be interrupted or delayed for brief periods during operations, most notably during tree removal. Public use may be limited if short term closures occur.

Smoke, dust, and heavy equipment used in mechanical treatment may temporarily affect the qualities that make recreation areas/routes desirable for use. These effects are considered short-term in nature and will result in a safer transportation infrastructure. Removal of larger trees will reduce the amount of fuel on the ground, decreasing the chance of future roadside fire starts.

Recreational Access

Effects related to transportation would be the same as in Alternative 2.

Measurement Indicator 2: ROS Consistency with the LRMP

Removal of only hazard trees as proposed in Alternative 3 would not change or alter the ROS classifications as they currently exist.

Removal of hazard trees will improve public safety and reduce instances of blocked routes due to fallen trees. The Forest Standards and Guidelines (LRMP 4-24 – 4-25) directs personnel to “Remove hazard trees in developed recreation sites, and along roads and trails.” The removal of Hazard trees proposed in this alternative is consistent with this direction.

Visual Resources

Measurement Indicator 1: VQO Consistency with the LRMP

Hazard tree removal treatments that occur along the roadside corridor will alter the appearance of the immediate foreground. The majority of what can be perceived as negative effects to the visual resource occurs during implementation. The sight of control lines, treatment edges, ground disturbance, and untreated slash can be anticipated. Stumps will be visible initially, but will become less obtrusive as “green up” occurs.

In this alternative, there would no immediate change to the existing condition in the middle and background scenery. Landscape features and swathes of blackened and fire-killed trees would remain. No variations in treatment would occur except at the project boundaries. The changes in those areas would continue to show noticeable treatment lines. Untreated areas and debris may delay natural regeneration of vegetation and would increase the potential for subsequent fires.

There are no expected changes to the VQOs within the project area. Since the Bald Fire, VQOs can no longer be met in the traditional sense. As vegetation returns, the quality of scenery would change over time, but the desired visual condition of “landscapes dominated by site-appropriate trees with variable densities”, listed in the Purpose and Need for this project, would be delayed.

Cumulative Effects

Although there may be some decrease in use in the short term, recreation activities would likely continue in the Project area. The management activities proposed under this alternative would result in some short term effects of noise, traffic, and smoke associated with treatment activities. Some temporary and short-term displacement of recreationists during operations can be anticipated.

Transportation activities associated with this Project and past, present, and foreseeable activities already listed would have no significant cumulative effects to recreation resources and overall recreation opportunities.

References

- Hesseln, Hayley; Loomis, John B.; and Gonzalez-Caban, Armando. 2004. The effects of fire on recreation demand in Montana. *Western Journal of Applied Forestry*. Vol. 19, no. 1 (Jan. 2004): p. 47-53.
- Taylor, Jonathan G. and Terry C. Daniel. 1984. Prescribed fire: public education and perception. *Journal of Forestry*. 82: p. 361-365.
- USDA Forest Service. 1992. Lassen National Forest Land and Resource Management Plan. Lassen National Forest. Pacific Southwest Region.
- USDA Forest Service. 1995. Landscape Aesthetics – A Handbook for Scenery Management. USDA Agriculture Handbook Number 701.
- Vaux, H.J., Jr., P.D. Gardner, and T.J. Mills. 1984. Methods for assessing the impact of fire on forest recreation. USDA Forest Service. Gen. Tech. Rep. PSW-79. 13 p.