

VISUALS /SCENIC RESOURCES

Introduction

The West Side Reservoir Post-Fire Project area lies adjacent to and above the west side of the Hungry Horse Reservoir. This area is visible from a variety of viewpoints, which include, but are not limited to:

- East Side Reservoir Road 38 (background viewing),
- West Side Reservoir Road 895,
- Alpha Beta Road 895H,
- Doris Creek Road 895A,
- Clayton Creek Road 1633.
- Trails

The Hungry Horse Reservoir area offers a significant variety of scenic viewing and recreation opportunities, such as driving for pleasure, photography, hiking, boating and fishing on the reservoir, hunting, and winter sports. The Hungry Horse Dam Visitor Center receives thousands of visitors each year. The north end of the Beta fire is visible from the dam.

Visual effects caused by fire, timber harvest, and associated activities vary in duration and intensity according to fire severity and the methods of timber harvest and site preparation/hazard reduction. The longest-lasting visual contrast is caused by soil disturbance from fire-line construction or building roads and bare soils from corridors and skid trails used for skyline and tractor logging. Effects from tree removal are generally shorter because ground revegetation often occurs within 2-3 years and some tree cover usually remains.

To some visitors, a wildfire is a natural element of the ecosystem that enhances the aesthetics of the landscape, so a burned area should be allowed to recover naturally. Other visitors find the visual changes undesirable and prefer clean up and rehabilitation of the area to promote vegetative recovery.

Information Sources

Information for the visuals and scenery resource were gathered systematically from established viewpoints. These viewpoints are described in greater detail below.

Analysis Area

The analysis area for the visual and scenic resources is the same as described for the vegetation resource. For this analysis, several potential viewing locations were considered. Viewpoints were chosen as representative of the spectrum of views of the area and are the basis for

analysis and modeling of the various alternatives. These viewpoints are described in detail below.

Affected Environment

The analysis for this project employs the visual management system developed by the U.S. Forest Service in: *Landscape Aesthetics - A Handbook for Scenery Management Number 701 (1995)*. It is used to analyze and evaluate the visual resource. This system replaces *The Visual Management System – Handbook Number 462 (USDA, 1974)*. This new system provides for the evaluation of physical features of the landscape called "scenic attractiveness classes" (formerly - "variety classes") together with the levels of concern people have regarding scenery (formerly - "sensitivity levels"). This information is synthesized to develop "Scenic Integrity Levels" (SILs). These terms were formerly referred to as visual quality objectives (VQOs).

The Flathead Forest Plan established Scenic Integrity Levels (SILs - formerly VQOs) for each management area (MA), those SILs found in the project area include.

High (similar to VQO of Retention) - Refers to landscapes where the valued landscape character "appears" intact. Deviations may be present but must repeat form, line, color, texture, and pattern common to the character so completely that they are not evident. MA 2 and MA 18.

Moderate (similar to VQO of Partial Retention) - Refers to landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed. MA 9 and MA13 and MA 13A.

Low (similar to VQO of Modification) - Refers to landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes outside the landscape being viewed. They should be compatible or complementary to the landscape character. MA 15.

Very Low (similar to VQO of Maximum Modification) - Scenic Integrity "appears heavily altered." Deviations may strongly dominate the landscape character. They may not be appropriate in shape, edge effect, or patterns. However, deviations must be shaped and blended with landforms so that elements such as unnatural edges or landings do not dominate the composition. MA 15.

A key component of these VQOs or SILs is that they do not apply to natural disturbance events. The Forest Plan, on pages II-17 and 18, states that "special concerns due to catastrophic events will be handled on a case-by-case basis." The Blackfoot and Ball Fire areas are the analysis area used to display the effects of the alternatives on the visual quality of the area.

Pre-fire Condition

Before the fires, tree harvesting from the last twenty to thirty years created some evident to obvious alterations to the landscape and an assortment of vegetation patterns. Past fires resulted in a mosaic over the landscape (refer to Figure 3-13). Past harvesting left a number of block-shaped openings scattered over the slopes that look unnatural due to a high degree of contrast in form, line, color, and texture between the harvested and non-harvested areas. Roads used to access these harvest areas are also common within the project area. The stark contrast between vegetation patterns is especially apparent during the winter months, when snow highlights the edges between harvested and non-harvested areas. This landscape is classified as *common* (which is a landscape where landforms and features are not of unusual or outstanding scenic quality) and distinctive to the Flathead National Forest. Based upon review of the constituent information listed in the Forest Plan the concern or sensitivity level for the scenery is rated as high.

Effects of the Fires

The effects of the fires have resulted in considerable change to the visual resource. Within the fire perimeter the fire consumed most of the vegetation, which is one of the elements used to determine scenic attractiveness classes. As the vegetation grows back, the scenic quality will improve. About 41% of the fire area had a high severity effect on the vegetation, meaning that the majority of the overstory canopy was killed, often with total consumption of the tree crowns (needles, twigs, and small branches). About 30% of the fire area resulted in a moderate severity effect to vegetation, which resulted in the majority of the understory vegetation being burned but not completely consumed, and 40 to 80 percent immediate mortality in the overstory trees. Many of these trees still retain their small branches. Low severity fire also affected 25% of the vegetation in the fire area. Low fire severity results in only low to moderate duff reduction and patches of unburned or lightly burned understory vegetation and trees. Immediate mortality of the overstory tree canopy is less than 40 percent. Many of the fire-killed trees still retain their small branches, twigs, and needles. About 4% of the fire area did not burn, leaving green islands or individual trees.

The fire has created numerous vistas throughout the project area. A positive effect of the fire is the opening up of new panoramic views of the area including Great Northern Mountain. Fire suppression activities and associated roadside hazard tree removal have created greater viewing opportunities from roads. The loss of screening vegetation along roads has opened up broad views of the blackened landscape as well as the negative visual effects of past timber harvesting and road construction. However, even after the fire, some of the landscape is screened from view because of the topography and dense patches of standing black dead and dying trees.

Views from many roadsides and trails have dramatically changed. This change is particularly evident as one drives the West Side Road through severely burned areas with blackened snags, moderately burned areas with a mix of live trees and snags and finally unburned. Ground vegetation should regenerate within one or two years. Initially snags will be a dominant feature on the landscape. This dominance will decrease as the forest regenerates and green vegetation will again dominate the landscape. During the first few years after the

fire most of the whitewood snags will slough their bark in patches that give them a leopard skin-like appearance. The red-colored vegetation will soon be replaced with shades of grays. Over time, colors will change due to re-growth and seasonal variations.

Much of the landscape along the West Side Road has been managed for timber meets the intent of the Forest Plan. Areas of high use, such as Road 895, meet the scenery goals of the Forest Plan, but other areas do not meet scenery goals. Some geometric-shaped cutting units from past harvests, surrounded by texture-dominated timber stands, contrast with the natural patterns on the landscape.



Figure 3-27: View of Hungry Horse Dam from Road 895H

Primary Travel Route Viewpoint

Road 895

The Blackfoot fires burned trees and vegetation with high to moderate intensity along areas of the West Side Road and reservoir corridor. Blackened skeletons of trees and charred snags line side stretches of the road. In some places scenic vistas, encountered while driving for pleasure, have been enhanced because views of the reservoir and scenic features, such as Great Northern Mountain, are now more open than prior to the fires.



Figure 3-28. Great Northern Mountain

Secondary Travel Route Viewpoint

Alpha Beta Creek Drainages Views

Harvesting trees during the last thirty years has created some patterns and changes in the dense texture of overstory trees. From the upper elevations the effects of roads and the geometric-shaped clear cuts from earlier logging are visible. The fire burned much of the screening vegetation along the roadsides and improved views. Changes to trees and brush resulting from the fire are obvious and similar to the effects as seen from the Westside Road. The middle ground views of past timber harvest activities are now more obvious from the roads and trails. The fire also opened views of middle ground roads and skid trails. Vegetation will soon screen views of those artificial features. The mosaic patterns, which resulted from the fires, will help subdue the previous geometric shapes and edges created by harvesting trees on steep slopes.

Environmental Consequences _____

No significant issues related to scenery were identified (refer to Chapter 2). The following effects indicator was used to focus the scenery analysis and disclose relevant environmental effects:

- a qualitative assessment of changes in scenic quality

Each of the action alternatives involves prescriptions and management activities that would result in a change from the existing character of the project area. Activities included in the action alternatives should meet the scenery levels allocated in the Forest Plan. The following information describes the effects or changes from the various alternatives as seen from selected viewing areas in the South Fork drainage.

Effects common to all action alternatives

Short-term changes may include views of stumps, changes in soil color, and reduction of the understory vegetation. In the long-term, those disturbances would be softened due to vegetation growth.

In the short-term, implementation of any of the action alternatives may create some changes to views in the project area. Tree canopy openings of various sizes resulting from salvage harvests may be visible. The proposed treatment areas would be spread throughout the burned areas. Structure of the forest stands would change from dense stands of snags to stands with more openings and fewer trees per acre.

Depending on the burn intensity and the amount of salvage harvests, the results may be a change the color of the overstory canopy from green to red and then later to gray shades. Those different vegetation structures would occur in a mosaic across the project area. The long-term result of the fire and salvage will be a variety of age and size structures visible from the roads and trails.

Alternative A (No Action)

Direct and Indirect Effects

With no management activities, the existing visual conditions as described will continue. Burned areas would revegetate and past harvest areas would grow and eventually fill in the openings. After many years of growth, a mature forest would fill in the burned areas and harvest openings.

In the short-term, Alternative A would result in a less visually diverse landscape than under alternatives proposing timber harvest. In the long-term (more than 10 years), under no action, the landscape would take longer to recover to its previous forested character. Past human-related changes to the landscape would remain evident for many years.

A dramatic appearance would result from the diversity of grasses and shrubs mixed with the weathering snags. The areas that burned at low intensity would support individuals and groups of conifers that would act as focal points and add variety to the landscape.

After 30 years or more, the area should meet SILs for middle ground and background viewing. Visual quality as seen from roads and trails (foreground) would be reduced as snags fall to the forest floor, creating a negative visual effect. The forest floor would appear

cluttered, and most of the vertical element that the snags provided would be lost. Vegetation growth will screen most views along open roads and trails.

Accumulations of forest litter and competition from grasses and shrubs would slow the establishment and growth of new trees. Trees would begin to sprout within the fire area where seed sources exist. Areas lacking seed sources would remain in grass and shrub form until trees can establish themselves. It may take the landscape 100 years or more to recover to its previous forested character. Natural reforestation would result in random spacing and distribution of species.

Areas harvested before the fire would recover to the pre-fire visual condition quite rapidly as newly planted trees, natural regeneration, and shrubs “green up.” Many of these areas also have islands of regeneration that survived the fire that would add to the viewing diversity.

Alternatives B through E

As viewed from the selected viewpoints, the effects of Alternatives B through E create similar results and therefore are analyzed together. As for visuals and scenery the action alternatives are essentially the same as far as effects go. Acres harvested vary from a high of 5300 to a low of 3900 (1400 difference). These 1400 acres will be dispersed across the entire area, which cannot be viewed as a whole.

Alt B would remove trees from riparian areas along open roads. A short-term negative effect would be views of stumps, but in the long term views of water features would add variety.

All units would be evaluated for regeneration needs to ensure rapid recovery to a forested condition. The majority of the proposed treatments in the Alpha Beta Creek drainages are not visible from the West Side Road; however, many of the treatments would be visible from the Alpha Beta Road, which is considered a secondary travel route.

Trails: The areas along trails that burned over would require intensive maintenance as the occurrence of downed trees increases. The scenic integrity level of high would not be met in the short term due to the excessive amounts of stumps, downed cut log ends and debris lining the trail corridor.

Harvesting would be more evident where it occurs adjacent to the trails. The SIL of high would not be met in the short term due to stumps and debris along the trail. In the long term, fewer downed logs would occur across the trail and near the trail, and vegetation would have screened out views of stumps.

Yarding logs via helicopter creates minor ground disturbances except for required large landing areas and therefore shows little impact to the visual resource (no roads, skid trails, cable corridors). Using helicopter logging in sensitive viewing areas facilitates meeting the goal of Retention/Partial Retention VQO. Winter logging is an allowable activity and will mitigate the visual effects from ground-disturbing activities more so than logging that may occur during the summer months that cause more soil disturbance.

Cumulative Effects

As mentioned earlier, past harvests, building roads, and other management activities have placed unnatural shapes and textures on the landscape.

All of the action alternatives in this project propose to leave both live and dead standing trees and logs throughout the project area. Where tree removal would occur, patches of live and dead trees would remain on site to help soften the effects from the salvage activities. Riparian areas for the most part will be left untreated. Also, conifers would be planted in some areas to help speed regeneration. The planting, plus expected natural regeneration would help to screen out views of stumps and debris within 5 to 10 years.

Visual changes from the effects of the fire would occur whether the changes are natural or induced by humans. In approximately 30 years, after the majority of the snags have fallen to the ground and trees and shrubs have recovered to a height of 20 feet or more, in most situations there would be little difference in the appearance between harvested areas and areas that recovered naturally.

REGULATORY FRAMEWORK AND CONSISTENCY

The Forest Plan (page II-17 and II-18) establishes Forest standards and visual quality objectives (now referred to as scenic integrity levels):

“In each management area, meet or exceed the recommended VQO. Where management area goals and objectives can be fully achieved and a higher VQO met without increased costs or reduced future options, the higher VQO should be achieved....Special concerns due to catastrophic events would be handled on a case-by-case basis.” Guidelines for meeting VQOs or scenic integrity levels is based on the Visual Management System developed by the U.S. Forest Service in: *Landscape Aesthetics - A Handbook for Scenery Management Number 701 (1995)*.

All alternatives have undergone visuals resource analysis guided by the above guidelines and were found to be in compliance with the management goals and VQOs established by the Forest Plan.