VISUAL, RECREATION, AND WILD AND SCENIC RIVER SPECIALIST REPORT

PETERSBURG PINES RESTORATION PROJECT

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<tr>
<td>BMP</td>
<td>Best Management Practice</td>
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<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>FSM</td>
<td>Forest Service Manual</td>
</tr>
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<td>MA</td>
<td>Management Area</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<td>NFS</td>
<td>National Forest System</td>
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<td>Outstandingly Remarkable Values</td>
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<td>RR</td>
<td>Riparian Reserve</td>
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<td>ROS</td>
<td>Recreation Opportunity Spectrum</td>
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<td>VQOs</td>
<td>Visual Quality Objectives</td>
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<tr>
<td>WSRs</td>
<td>Wild and Scenic Rivers</td>
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</table>
Executive Summary

This report is based upon the proposed action that included two road-related actions: the decommissioning of 3,700 feet of existing roadbed and the addition of 1,700 feet of existing roadbed to the National Forest Road system. Since this report was written, the District Ranger decided to eliminate these two road-related actions from the final Proposed Action as documented in the environmental analysis. The elimination of these road actions slightly decreases the potential adverse impacts that are documented in this report. Therefore, the analysis has not been revised as the current effects are within the scope and intensity already analyzed. The reader should expect to see references to these road actions in the remainder of this document.

The project area is a relatively intact forest landscape that has experienced vegetative ingrowth, increasing the potential for stand-replacing wildfires and threat to neighboring communities, forestlands, and available foraging habitat for big game. The project area is visible from key viewpoints such as County roads, Forest routes, and hiking trails in the action area. There are visible signs of human disturbances (e.g., roadways, signs, small structures, stumps from previous logging, trails) and small, low intensity wildfire burns that are part of the forest's natural ecosystem. These are not dominant visual elements in the landscape and contribute to a project area that is primarily in Partial Retention VQO/Scenic Integrity, with smaller areas of Modification and Maximum Modification.

The Petersburg Pines Restoration Project area has yearlong vehicle access where recreationists visit primarily to hunt big game or cut firewood. This area provides opportunities for a quality hunting experience, however the dense understory make this challenging for hunters. Use levels range from low to moderate with the heaviest use occurring during the fall deer, bear and elk hunting seasons. Use is mostly dispersed throughout the project area with some camping at the East Fork Campground. Other recreationists use one or more of the four rustic trails heads located at Garden Gulch, South Fork, China Gulch and Cecil Lake. The project area has numerous forest roads and six system trails provide access into hunting areas and hiking access into the primitive Trinity Alps Wilderness. Approximately 95 % of the area lies within the Recreation Opportunity Class of Roaded Natural.

The analysis utilizes the Klamath National Forest Plan to provide key management guidance and direction for each resource and for special geographic areas within the project area. Forest Service Manuals and Handbooks provided additional guidance and policy for the resources discussed in this report. These were used as the basis for analysis. Effects indicators for visual resources focus on changes to the existing visual setting, impact to viewers, requirements of the Klamath Forest Plan VQO designation, and through evaluation of scenery sustainability concepts described in Scenery Management System Handbook Appendix J. Effects indicators for recreation, wild, scenic, and recreational rives, and inventoried roadless areas focus on the changes to the setting and the experiences provided by the attractions and requirements established through Klamath Forest Plan ROS class designations.

Alternative 1, the No Action Alternative, would not directly affect the existing scenic character or VQO designations of the Petersburg Pines project area, because vegetation would remain
largely intact. However, it could have negative, indirect and long-term effects to the project area’s scenic character by increasing the chance for catastrophic fire events that could threaten the Scenic Integrity and VQO designation of Partial Retention. The No Action Alternative would not directly or indirectly affect the Petersburg Pines project area’s recreation settings, recreation values, ROS classes, the availability of the area’s recreation activities or the ORVs in the South or the East Fork of the South Fork of the Salmon River, as no treatment activities would occur.

Alternatives 2 and 3 have similar temporary adverse effects on visual, recreation, and Wild and Scenic River resources during the implementation phases of fuel treatments. Alternatives 2 and 3 would have negative direct and indirect effects on the scenic character by putting visible human modifications upon the landscape through project activities that include logging, fuel treatments, and roadway system modifications. Alternative 3 would reduce the magnitude of short-term adverse visual effects by reducing the amount of heavy machinery that would be seen in some riparian reserve areas and limiting activities to hand treatments and prescribed burns. Changes resulting from both alternatives would be viewed differently depending upon each individual’s awareness and understanding of forest management activities. Both alternatives include BMPs and resource design measures that would reduce negative effects to visual resources by reducing and mitigating the appearance of disturbance. In addition, once a unit has received its prescribed treatment, including scenery design measures and BMPs, it would begin to naturally rehabilitate itself within 3 years as new needles drop, branches and crowns grow, and herbaceous understory colonizes the floor of canopy openings. This would reduce the visual appearance of disturbance and meet long-term Scenic Integrity/VQO designations. In general, vegetation management activities such as variable density thinning and prescribed fires would not greatly alter the existing scenic character when coupled with the design measures. Both alternatives would increase Scenic Stability by greatly reducing fuel loads and the potential for catastrophic fire events that would affect Major Scenery Attributes of vegetation cover.

The long term recreation effects for Alternatives 2 and 3 are substantially enhanced with improved access to many areas within the project which are currently hampered by dense understory vegetation. All phases of the project would contribute to a more open forest which would facilitate hunter access and added firewood supplies for woodcutters. Hunters would have substantially increased opportunities to view or hunt deer and elk. Recreationists traveling the road or trail systems would also experience similar benefits. During the Forest Planning process, two segments of the Salmon River within the project area were evaluated for possible inclusion into the Wild and Scenic River System. The East Fork of the South Fork and a portion of the South Fork of the Salmon River were determined to be suitable and have been recommended to Congress for inclusion into the Wild and Scenic River System. All alternatives have no effect on the suitability of the recommended portions of the South Fork and the East Fork of the South Fork of the Salmon River for inclusion into the Wild and Scenic River System. The Orleans Mountain Roadless Area (approximately 1,223 acres) was also evaluated during the Forest planning process and the Record of Decision released its management to the Standards and Guidelines within each management area. The project would no adverse effect on the Orleans Mountain Roadless Area.
The Petersburg Pines project and its alternatives are sensitive to the visual, recreation, and Wild and Scenic River resources on the project site and include design measures to ensure that impacts to those resources are minimized and in compliance with the direction set for in the Klamath Forest Plan.
This report discloses the existing conditions and any direct, indirect, and cumulative environmental effects that would result from the proposed action and alternatives. The document is organized into the following parts:

- **Regulatory Setting and Methodology:** This section presents the metrics or environmental indicators used to conduct the analysis, as well as the desired conditions (as appropriate).
- **Affected Environment and Environmental Consequences:** This section presents the existing conditions and the environmental effects of implementing the proposed action and other alternatives. The effects of the No-Action Alternative are described first to provide a baseline for evaluation and comparison of the other alternatives that follow.
- **Consultation and Coordination:** This section provides a list of preparers and agencies consulted during the development of this document.
- **References:** This section lists bibliographical information of any literature cited and personal communications used to write this report.
- **Appendices:** The appendices provide more detailed information to support the analyses presented in the report type.

### 1.1 Summary of the Proposed Action and Alternatives

#### 1.1.1 Alternative 2—Proposed Action

Alternative 2 was designed to meet the purpose and need for action. It will treat approximately 7,350 acres in 126 treatment units as summarized in Table 1 below. Activities include variable density thinning of conifer stands and fuel treatments to reduce potential wildfire severity; activities will also be responsive to the objectives of the Klamath National Forest’s Elk Habitat Strategy. Activity fuels will be treated in all stands. Road actions consist of the addition of 1,700 feet of existing road surface to the permanent road system and the decommissioning of 3,740 feet of existing road surface in order to restore ecological function. Temporary roads and landings will be constructed for project implementation and will be hydrologically restored after the project is implemented; however, existing facilities will be used to the greatest extent possible. A full description of the Proposed Action and Alternative 3 is available in Chapter 2 of the EA, along with the design features and Best Management Practices.

#### 1.1.2 Alternative 3

Alternative 3 was designed to respond to the concern raised by members of the public regarding potential effects on habitat quality and quantity and watershed effects in riparian
reserves, while still meeting the purpose and need for action to reduce fuels and improve wildlife habitat. Given the sensitive nature of habitat and water resources provided by riparian reserves, the Forest Service developed this alternative in order to address these concerns. Alternative 3 will treat approximately 7,212 acres in 131 treatment units. This alternative reduces the amount of commercial entry and harvesting acres treated in riparian reserves by 492 acres. It also modifies the proposed treatments in some of the riparian reserves by limiting treatments to hand treatments and prescribed burning to treat ladder and understory fuels as a means to reduce potential wildfire behavior. This alternative includes 171 acres of hand treatment only in riparian reserves. The Proposed Action, by contrast, includes commercial entry and harvesting in all of the riparian reserves that are within the silvicultural treatment units. The amount of roads and support activities listed under the Proposed Action are applicable to Alternative 3 except that there will be 5 fewer landings required for ground-based system tree removal due to reductions in areas being harvested in riparian reserves.

The following table displays acres of the Proposed Action and Alternative 3 for each management area and by treatment type and logging system.

Table 1. Comparison of Treatment Acreages for the Proposed Action and Alternative 3

<table>
<thead>
<tr>
<th>Management Area</th>
<th>Silviculture - Conifer Stand Thinning and Fuel Reductions</th>
<th>Prescribed Understory Burning (conifer stands)</th>
<th>Fuelbreaks</th>
<th>Roadside Fuel Treatments</th>
<th>Private Land Buffer</th>
<th>Riparian Reserves Fuel Reduction (PCT/piling/L, GP and Rx burns)</th>
<th>Totals</th>
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<td>216</td>
<td>652</td>
<td>754</td>
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<tr>
<td>Tractor</td>
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<tr>
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<td>Management Area 15 - Partial Retention Visual Quality Objective</td>
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1.2 Issue Significance

As identified in the Petersburg Pines Restoration Project Scoping Summary Report, primary concerns focus on such topics as percent canopy cover, harvesting techniques, maintaining stable soils, prevention of habitat fragmentation, protection of habitat, and protection and maintaining function of riparian areas (ICF 2010). Three comments (numbers 82, 83, and 123) relate to visual, recreation, and Wild and Scenic River resources. Two of the comments address disclosing how the proposed project would affect visual quality in the Recreational River lands allocation and how management activities will impact Recreation River resources. These comments do not express an issue of significance, but a need for analysis that is contained within this report. The other comment addresses preventing helicopter logging in the Recreational River area, stressing that it is uneconomical and increases the potential that large fire-resistant trees would be logged. This was determined to be a non-significant issue, because the “economic feasibility is considered in overall project design.” Furthermore, the most appropriate method of logging is chosen on a stand-by-stand, site-specific basis that is based on stand conditions such as slope, scenery, and other resource concerns and that meets treatment objectives and purpose and need. Based on the three comments received, no issues of significance were determined for visual, recreation, and Wild and Scenic River resources.
2.1 Management Direction from Forest Plan

2.1.1 Forest Program Emphasis

Visual Resource Management
- Manage visual resources to conserve the natural scenic character of the Forest. Meet the Forest Plan’s adopted visual quality objectives (VQOs). Emphasize management of the visual resource seen from communities, high-use recreation areas and major roads and trails. Conserve the inherent scenic attractiveness of distinctive landscapes.
- Rehabilitate areas not currently meeting VQOs.

Recreation
- Develop a program that is supportive to the communities’ efforts to diversify, strengthen, and attract natural resource-oriented activities and businesses, which strengthen rural economies.
- Offer a wide range of recreation attractions and opportunities that are responsive to the demands of multi-cultural, traditional, and non-traditional recreation users.
- Locate and manage developed sites primarily to support recreationists as they participate in off-site recreation activities within the recreation emphasis areas, with the exceptions of Kangaroo Lake and Juanita Lake, which provide a self-contained recreation experience.
- Expand opportunities for barrier-free access for mobility-impaired individuals.
- Implement the National, Regional, and Forest Recreation strategies.

Wild and Scenic Rivers Management
- Manage to maintain or enhance the identified Outstandingly Remarkable Values (ORVs) and free flowing condition of Wild and Scenic Rivers (WSRs).

Released Roadless Areas Management
The Record of Decision on the Forest Plan (page 3) states in part “no new roads will be constructed within roadless areas in key Watersheds. All other released roadless areas will be managed according to the direction of the management area in which they occur.”
2.1.2 Forestwide Standards and Guidelines

Visual Resource Management

11-1: VQOs were developed using Agriculture Handbooks 462 and 559, which define nationally established principles and methods of the Visual Resource Management System. The VQOs apply to site-specific projects visible from the Forest’s inventoried Moderate and High Sensitivity Viewpoints (Level 1 & 2). The VQOs are minimum conditions to be achieved as soon as possible in all management areas and within 3 years for all VQOs except Preservation and Maximum Modification, which must be met immediately. Facilities and developments, such as roads, trails, campground facilities, structures, signs and interpretive stations, are not required to meet the Management Area VQOs when viewed in immediate foreground (300 feet). These developments will be crafted in materials and appearance to harmonize and compliment the natural character of their immediate settings. Maintain an inventory of High and Moderate Sensitivity Viewpoints on file in the Forest Supervisor’s Office.

11-2: Conditions that may be used to fine-tune the adopted VQOs include (Landscape Management System Handbook, Volume 1, Chapter 2):

1. Discrepancies in Landscape Variety classification,
2. Changes in Visual Sensitivity Levels,
3. Discrepancies in the seen area mapping (that is, the ability or inability to view an area from a designated road or trail).

11-3: Maintain the VQOs as designated. Where possible, and where compatible with other resource objectives, strive for higher visual quality standards. Visual objectives may be foregone in the short-term, following extreme natural events, in order to revegetate the area.

11-4: Perpetuate the ecologically established landscape character when implementing management activities. Manage activities in accordance with VQOs to reflect the form, line, color, and texture of natural occurrences.

11-5: Develop Visual Management Strategies for selected highway corridors, trails, water bodies, rivers, and areas of concentrated public use to achieve a desired scenic character, and to reduce the visual impacts of management activities. Develop management strategies for areas of concentrated use to rehabilitate landscapes that do not currently meet the adopted VQOs. The criteria to be used to prioritize rehabilitation efforts should include:

1. The relative scenic or recreational importance of the area and the amount of deviation from the adopted VQOs.
2. The length of time it would take natural processes to reduce the visual impacts so they meet the adopted VQOs.
3. The length of time it would take rehabilitation measures to meet the adopted VQOs.
4. The level of coordination and interaction with other resources that would be necessary to rehabilitate the project area.
5. The economic cost of rehabilitation measures.
11-7: In the case of recovery activities after extreme catastrophic events such as intense wildland fires, time periods to achieve the VQOs stated in Forest-wide and Management Area Standards and Guidelines may be extended. This would be necessary where previously unnoticed scenery alterations are exposed to view due to loss of vegetative screening, or during timber salvage activities where recovery of forest vegetation is determined to be of greater importance than achievement of VQOs within the time periods established.

11-8: Areas not visible from inventoried High or Moderate Sensitivity Viewpoints (Level 1 and 2) shall be managed to appear as little modified as possible consistent with management goals, and no more altered in appearance than Maximum Modification.

Recreation

12-1: Manage Forest resources to provide a broad range of recreational opportunities that meet changing recreational demands. Actively utilize the Forest’s Meaningful Measures methodology for establishing recreation program standards, monitoring, and reporting accomplishments. Identify, develop, and conserve recreational opportunities within developed and dispersed settings. Eliminate or restrictively manage sites that receive minimal use; or, remove the facilities and manage them as dispersed spots. Develop a range of recreation opportunities within primitive, semi-primitive non-motorized, semi-primitive motorized, and roaded natural areas. As opportunities are identified for these areas, they should be managed to reflect the needs of a multi-cultural public. Provide a variety of sites to meet visitor preferences, needs, and expectations to complement opportunities within the recreation emphasis area in which the site is located.

12-7: Manage existing and future developed sites to prevent degradation of the surrounding areas. Programmed timber harvest shall not be scheduled from developed recreation sites, but opportunities to manage the vegetation to improve safety and aesthetics should be taken.

12-26: ROS [Recreation Opportunity Spectrum] classes identified for management areas emphasize general direction for recreation management. Specific ROS criteria and conditions are subject to adjustment in order to achieve desired conditions.

Wild and Scenic Rivers Management

15-1: The Forest will continue to evaluate potential rivers for inclusion into the WSRs system. Manage areas proposed for WSRs designation by the Forest using the standards and guidelines described in the Designated and Eligible Wild, Scenic, and Recreational River Management Areas Standards and Guidelines.

15-2: No irretrievable or irreversible commitment of resources that would preclude designation would be allowed for eligible rivers that are being recommended for inclusion into the National WSRs System until Congress or the Secretary of Interior has signed the designation order for new inclusions recommended in this Plan.

15-3: In order to maintain continuity of management direction along WSRs segments, management direction of tributary WSRs shall not take precedence over main stem WSRs directions within their areas of confluence or viewsheds.
15-4: Land exchanges, qualifying under the provisions of the Small Tracts Act, may be pursued if the exchange will replace parcels of NFS [National Forest System] land within the WSRs corridor for parcels of private land within the corridor.

**Released Roadless Area Management**

14-1: Released roadless areas will be managed according to the objectives of the management area in which they occur.

**2.1.3 Management Areas**

As stated in the Chapter 4 Management Direction introduction, an asterisk before the direction indicates that "additional direction includes, but is not limited to, directives, policy, handbooks, manuals as well as other plans, regulations, laws and treaties. The standards and guidelines presented here supersede other direction except treaties, laws, and regulations. These standards and guidelines do not apply where they would be contrary to existing law or regulation or where they would require the Forest to take action for which it does not have authority."

**Management Area (MA) 10–Riparian Reserves**

**Visual Resource Management**

MA10-21: Manage these areas to meet the intent of the Forest VQO map. As a minimum, manage the lands within the areas to meet a Partial Retention VQO.

**Recreation Management**

MA10-22: New recreational facilities within RRs [Riparian Reserves], including trails and dispersed sites, should be designed to not prevent meeting Aquatic Conservation Strategy objectives. Construction of these facilities should not prevent future attainment of these objectives. For existing recreation facilities within RRs, evaluate and mitigate impact to ensure that these do not prevent and, to the extent practicable, contribute to attainment of Aquatic Conservation Strategy objectives.

MA10-23: Adjust dispersed and developed recreation practices that retard or prevent attainment of Aquatic Conservation Strategy objectives. Where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities and/or specific site closures are not effective, eliminate the practice or occupancy.

MA10-24: Wild and Scenic Rivers and Wilderness management plans will address attainment of Aquatic Conservation Strategy objectives.

MA10-25: Recreation facilities within the 100-year flood plain shall be guided by Executive Order 11990 and 11988 (Floodplain Management) with any exceptions consistent with requirements of FSM 2527 (Wetlands Management).

MA10-26: Manage recreational settings to generally achieve semi-primitive or roaded natural ROS conditions.
Management Area 13–Designated and Recommended Recreational Rivers

General

MA13-1: These guidelines apply to the extent of the Forest Service’s jurisdiction over Federal lands, Federal scenic or access easements and other interests. They do not apply to privately owned lands. These standards and guidelines shall be used with the USDA-USDI Revised Guidelines (47 Federal Register 39454) and the Land Management Planning Handbook, Chapter 8. These guidelines also govern interim management of study rivers and designated rivers.

MA13-2: Management of the ORVs will be the driving management intent, consistent with maintaining the Recreational character of the river. When the ORVs can be protected or maintained without adversely impacting the river designation, that activity or project may be implemented.

Water

MA13-3: Existing low dams, diversion works, riprap and other minor structures should be allowed, provided the waterway remains generally natural in appearance. New structures that adversely impact the ORVs for which the river was established shall be prohibited. New applications for water withdrawal may be challenged if they have a negative impact on ORVs.

MA13-4: Oppose all hydro-electric power facilities unless there is a clear public need for the facility.

MA13-5: Prohibit new flood control dams and levees.

Visual Resource Management

MA13-6: Design management activities to meet a Partial Retention VQO within the WSRs Corridor, in the foreground beyond the Corridor and in the middleground beyond the Corridor. Note: VQOs as designated elsewhere in this document for State Scenic Highways may supersede these VQOs.

Recreation Management

MA13-7: Develop public use facilities, such as campgrounds and picnic areas, along rivers as needed. The river area shall be managed for the enjoyment of recreation users as long as those recreational uses do not adversely affect the ORVs for which the river was designated.

MA13-8: Manage, develop interpretive services, and control public use as necessary to protect the outstandingly remarkable recreational river values.

MA13-9: Manage recreational settings to generally achieve semi-primitive or roaded natural ROS conditions.

Transportation and Facilities Management

MA13-13: Paralleling roads may be constructed on one or both river banks. Bridge crossings and river access points are acceptable.
MA13-14: Small communities as well as dispersed or cluster residential developments may be allowed. New structures may be allowed for intensive recreation use.

**Vegetation Management**

MA13-15: Lands may be managed for a full range of silvicultural uses, to the extent currently practiced. Timber harvesting would be allowed under standard restrictions to protect the immediate river environment, water quality, scenic, fish and wildlife and other values.

MA13-16: Schedule moderate timber yields, compatible with area goals.

**Fire Management**

MA13-17: Fire management strategies should normally follow those of the surrounding area. Recognize and incorporate the Recreational river values into the fire suppression tactics. Prescribed fire may be used within the management area to maintain the ecological functions, if it maintains the ORV’s for which the river was designated.

**Management Area 15 – Partial Retention Visual Quality Objective**

**General**

MA15-1: Designate all management activities to meet a Partial Retention VQO as defined in the USDA Agriculture Handbook #462, National Forest Landscape Management, Vol. 2, Chapter 1.

MA15-2: Base the assessment of visual conditions on what can be seen, or the "seen areas" as observed from Sensitivity Level 1 and/or Sensitivity Level 2 viewpoints and travelways.

**Wildlife**

MA15-3: Manage the area primarily for forested, mid- to late-seral stage (3A, 3BC, 4BC) habitat. Management activities should promote the growth of closed canopy forest with scattered openings due to management activities or natural occurrences where the area is capable of supporting forested types of those seral stages.

MA15-4: Lands within this management area will contribute to the desired level of hardwood and snag densities within a given landscape (see Forest-wide hardwood and snag goals). The actual number of hardwoods and snags to be maintained on a given acre will be dependent on the level of each within the surrounding landscape, and the management intent within that landscape.

**Visual Resource Management**

MA15-5: Project activities should meet a Partial Retention VQO as soon after project completion as possible, and at the maximum, within 3 years of project completion.

MA15-6: In some cases, because of fire salvage efforts, past management activities and changing management objectives, the existing visual conditions may not currently meet the desired visual goal of Partial Retention. Such areas should be rehabilitated over time to the Partial Retention visual quality. This should be accomplished in 5 to 10 years. Rehabilitation may be
achieved through alteration, concealment, or removal of obtrusive elements. Such rehabilitation efforts might include:

1. Vegetative alterations to reduce effects of obtrusive edges, shapes, patterns, and colors (for example, revegetation of cuts and fills).
2. Terrain alterations to blend better with natural slopes.
3. Alteration, concealment, or removal of structures containing obtrusive form, texture, color, or light-reflective characteristics.
4. Alteration, concealment, or removal of slash, root wads, and debris.

MA15-7: In areas needing scenic rehabilitation, any new management activities that are undertaken should:

1. Be conducted to meet Partial Retention VQO.
2. Be conducted in a way that assures that the activity shall not delay the period it would otherwise take to “recover” the area to a Partial Retention visual condition.

**Recreation Management**

MA15-8: Manage recreational settings to generally achieve semi-primitive or roaded natural ROS conditions.

**Minerals**

MA15-9: Reasonable mitigation measures should be incorporated in approved plans of operations to meet Partial Retention VQOs.

**Vegetative Management**

MA15-10: Design all vegetative management activities to meet Partial Retention VQOs as defined in Agriculture Handbook 462, Visual Management System.

MA15-11: Schedule moderate timber yields, compatible with area goals.

MA15-12: Use silvicultural treatments compatible with area goals. Depending on conditions, either even-aged or uneven-aged silvicultural treatments may be compatible with the management objectives for these areas.

MA15-13: Timber salvage (wood fiber objectives) of trees killed by wildfire, pest infestation or other natural processes should be implemented in a manner consistent with maintaining the resource management goals of the area. Minimize the loss of timber value where possible.

MA15-14: The salvage, reforestation, and rehabilitation of sites within this management area deforested by fire, pest infestations, etc. should be a moderate priority.
Fire Management

MA15-15: Use prescribed fire to reduce natural fuel buildups, to treat post harvest fuels and to influence vegetative development or composition when there is no market for the slash or down wood.

MA15-16: Design fuelbreaks to mimic the natural characteristics of the area. On steep ground, design units that are operationally feasible and effective to treat fuels.

MA15-8: Manage recreational settings to generally achieve semi-primitive or roaded natural ROS conditions.

Management Area 17 – General Forest

Visual Quality Management

MA17-2: Manage these areas to meet the intent of the Forest VQO map. As a minimum, manage the lands within the area to meet a Maximum Modification VQO.

Recreation Management


MA17-4: Manage recreational settings to generally achieve roaded natural or rural ROS conditions. Transportation and Facilities Management

MA17-5: Develop a transportation network that effectively and efficiently allows the transport of commodities to available markets. The system should be economical, safe, and environmentally sensitive.

Fire Management

MA17-16: Design fuelbreaks to mimic the natural characteristics of the area. On steep ground, design units that are operationally feasible and effective to treat fuels. MA17-6 Maintain surplus or infrequently used roads in a self-maintaining condition (Level 1) to reduce watershed and wildlife impacts and to reduce road maintenance costs.

2.2 Other Relevant Laws, Policies, and Regulations

There are no roadways in the project area designated in federal, State, or local plans as a scenic roadway or as a corridor worthy of protection for maintaining and enhancing scenic viewsheds.

2.2.1 The National Environmental Policy Act of 1969

National Environmental Policy Act (NEPA) criteria for determining adverse affects are listed in Title 40, Code of Federal Regulations (CFR), Section 1508.27. Section 101 [42 USC § 4331] sets forth that NEPA is in place to:
1. “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

Section 102 [42 USC § 4332] sets forth that NEPA is in place to: “(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man’s environment.”

2.2.2 Forest Service Manual (FSM)

1020.21. “The mission of the Forest Service is to sustain the health, diversity, and productivity of the Nation’s forest and grasslands to meet the needs of present and future generations.”

2330.3. Establish priorities for the development and management of sites in the following order:
1. Ensure public health and safety.
2. Protect the natural environment of the site.
3. Manage and maintain sites and facilities to enhance users’ interaction with the natural resource.
4. Provide new developments that conform to the NFS recreation role.

2350.31. Manage trail, river, and similar recreation opportunities and their recreational access and support facilities under the principles enumerated in FSM 2303.
1. Emphasize recreation opportunities and supporting facilities that are consistent with applicable ROS classes.
2. Coordinate management of trail, river, and similar recreation opportunities with management of neighboring recreational sites and facilities, including campgrounds, picnic areas, ski areas, resorts, and, as appropriate, recreational facilities off NFS lands.
3. Coordinate management of trail, river, and similar recreational opportunities with other related resource management activities to maximize efficiency and integrate management objectives, as appropriate.
4. Regulate uses to the extent necessary to provide for user and public safety; to protect natural, cultural, and historical resources; to minimize conflict and maximize responsible use; to achieve recreation experience objectives; and to comply with Federal and State laws.

5. Inform users about management objectives and low-impact recreation practices.

6. Do not maintain unauthorized trails.

2380. 3.1. It is Forest Service policy to: Inventory, evaluate, manage, and, where necessary, restore scenery as a fully integrated part of the ecosystems of NFS lands and of the land and resource management and planning process.

2380.43.4-5. “Conduct and document a scenery assessment for all activities that may affect scenic resources and that require analysis under the National Environmental Policy Act. Ensure application of the principles of landscape aesthetics, scenery management, and environmental design in project-level planning.”

2.3 Scope of the Analysis, Methodology, and Proposed Indicators and Metrics

The proposed action sets the framework for this analysis. A variety of tools were used to predict the impacts for each alternative. The most significant among these were personal interviews with the Salmon/Scott River Ranger District Recreation and Wildlife staff that provided information about recreation, wildlife, and wild and scenic river use in the project area. Secondly, the Klamath National Forest Plan was important in describing the existing conditions and providing key management guidance and direction for each resource and for special geographic areas within the project area. Forest Service Manuals and Handbooks (2300 Sections) provided additional guidance and policy for the resources discussed in this report. Numerous documents, including environmental analysis on the Caribou and Panther Fire projects also aided in preparation of this analysis. Finally, an on-site visit combined with personal professional experience in evaluating the impacts of proposed projects on National Forest lands was valuable in predicting impact.

The effects indicators for visual resources focus on the changes to the existing visual setting and the experiences provided by the attractions and requirements established through Klamath Forest Plan “VQOs” class designations that are defined by the Agriculture Handbook 462, Visual Management System and through evaluation of scenery sustainability concepts described in SMS [Scenery Management System] Handbook Appendix J (USDA Forest Service 2007). The action area includes Partial Retention, Modification, and Maximum Modification VQOs as described in more detail in Table 2, below, and displayed in Figure 1. The visual indicators are: 1) changes to the existing setting, including changes to sense of place, visual character, scenic stability, visibility, and scenic integrity; and 2) compliance with the Standards and Guidelines for Management Areas 11, 13, 15, and 17. In addition, the experience of the Forest Service staff in evaluating similar projects with similar effects became useful in describing the effects of the
proposed projects on visual resources. Finally, professional judgments gained on similar projects elsewhere on NFS lands contributed to the evaluation of potential effects.

Table 2. Visual Quality Objectives and Definitions

<table>
<thead>
<tr>
<th>Visual Quality Objective</th>
<th>Objective Definition</th>
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</table>
| Partial Retention        | - Management activities are visually subordinate to characteristic landscape.  
                           - Activities may repeat form, line, color, and texture found in characteristic landscape, and changes in the size, amount, intensity, direction, and pattern of these visual elements should remain visually subordinate.  
                           - New or uncommon patterns of form, line, color, and texture may be added to the characteristic landscape through management activities as long as they are visually subordinate. |
| Modification             | - Management activities may visually dominate the characteristic landscape.  
                           - Activities resulting in changes in landform and vegetation cover must borrow from form, line, color, and texture found naturally in the landscape and at a scale that is also naturally occurring nearby.  
                           - Infrastructure features, such as buildings, roads, and signs, should mimic form, line, color, texture, and scale that is compatible with the surrounding landscape. |
| Maximum Modification     | - Management activities may visually dominate the characteristic landscape.  
                           - Activities must appear as natural occurrences within surrounding area when viewed as background, but can appear out of keeping with naturally established form, line, color, texture, and scale when viewed in the foreground or middleground.  
                           - Infrastructure features, such as buildings, roads, and signs, should be visually subordinate when viewed as background. |

Figure 1. Visual Quality Objectives
The effects indicators for recreation, wild, scenic, and recreational rivers, and inventoried roadless areas focus on the changes to the setting and the experiences provided by the attractions and requirements established through Klamath Forest Plan ROS class designations. The recreation indicators are: 1) changes to the existing facilities and setting, and 2) changes to the recreational experiences and opportunities. Indicators for WSRs are changes to the ORVs identified for each segment recommended for inclusion into the WSRs System. Indicators for inventoried roadless areas are: 1) changes to the existing roadless areas, and 2) compliance with the Standards and Guidelines for Management Areas 13, 15, and 17. In addition, the experience of the Forest Service staff in evaluating similar projects with similar effects became useful in describing the effects of the proposed projects on recreation and WSRs resources. Finally, professional judgments gained on similar projects elsewhere on NFS lands contributed to the evaluation of potential effects.
Chapter 3

Affected Environment and Environmental Consequences

3.1 Existing Conditions

3.1.1 Visual Resources

Existing Scenic Character, Ecosystem Context, and Desired Scenic Character

Existing Scenic Character

The Petersburg Pines Restoration project is accessed by County roads IC02 (Primary Forest Route 93) (Figure 2) to the north, which is paved to Cecilville, and IE003 to the east, which is graded and graveled. Smaller, graded forest routes travel through the action area, allowing access to the various portions of the Petersburg Pines Restoration project site. All of these roadways wind through the tall, vertical ponderosa pine and mixed Douglas-fir forest stands that cover the numerous rising peaks and slopes of the Salmon Mountains, extending down to the banks of the South Fork Salmon River and numerous creeks. The waterways travel over and around exposed gravel bars and deposits, are often encased by large rock outcroppings, and bordered by thin bands of riparian vegetation that are surrounded by dense, conical pine and fir trees that create an enclosed, narrow valley (Figures 3 and 4). These dark green pine and fir forests are sprinkled with lighter green deciduous trees and understory shrubs that give way to hues of yellow, orange, and brown in the fall. Fallen brown needles, pine cones, and dead branches litter the forest floor where canopies are dense and small patches to larger meadows of grass and herbaceous vegetation are present where larger openings exist. Evidence of historic mining can also be seen that have created large openings that are scattered with remnant rocks, have areas where soil was removed to expose subsurface rock outcroppings, and small tailing piles. Grass and ruderal vegetation has colonized areas where soil remains and large, remnant pine and fir trees dot the area that was mined (Figure 5).

Major scenery attributes of the project area are its steep, mountainous terrain and pine and fir covered slopes. Minor scenery attributes are its smaller creeks; rock outcroppings; seasonal interest such as wildflowers in the spring, deciduous fall colors, and snow covered mountains; open canopy areas (e.g., meadows and remnant mine areas), and wildlife and plant viewing.
Figure 2. Forest Route 38N27 Looking East down Forest Highway 93 at the Northern Project Border

Figure 3. View from Cecilville Bridge on Forest Route 38N27 Looking West down the South Fork Salmon River
Figure 4. Forest Route 38N27 Looking East up the South Fork Salmon River

Figure 5. Forest Route 37N08 Looking Toward Area That Was Historically Hydraulically Mined
Ecosystem Context

The Petersburg Pine Restoration project area is a relatively intact forest landscape that has experienced ingrowth of forest stands and vegetation from plantations spreading to encroach upon meadows, grasslands, and oak shrublands. This has increased the potential for stand-replacing wildfires, such as the Caribou fire, that are also a threat to neighboring communities and forestlands and reduces available foraging habitat for big game. A mild to severe wildfire event has the potential to drastically alter the visual landscape that could take years to recover to existing VQO designations. A reduction of foraging habitat would affect access to areas where recreationists go to experience the forest, meadows, grasslands, and oak shrublands and their associated wildlife whether involved in such activities as hiking, wildlife or plant viewing, or photography or hunting and fishing.

Desired Scenic Character

The Desired Scenic Character for the project would generally maintain the existing scenic character of the project area and VQO designation and sustainability over time by thinning the pattern of enclosed canopy but not to a level that openings appear visually dominant; reducing the potential for stand-replacing fires; and reclaiming meadows, grasslands, and oak shrublands areas so they are available for future enjoyment.

Scenic Integrity

Scenic Integrity is “the degree to which a landscape is free from visible disturbances that detract from the natural or socially valued appearance” (USDA Forest Service 2007). The Klamath National Forest measures Scenic Integrity using the VQO levels (refer to Table 2). The action area is primarily in the Partial Retention VQO, with smaller areas of Modification and Maximum Modification. While there is evidence of small, low intensity burns in the project area, the forest is generally intact and wildfire is part of the forest’s natural ecosystem and would be visible historically, contributing to the Partial Retention scenic integrity from key viewpoints such as roadways and hiking trails. Also contributing to the Partial Retention scenic integrity are human disturbances that are visible within the project area that include roadways, signs, small structures, stumps from previous logging, and trails. However, these features are not dominant visual elements in the landscape.

Visibility

The majority of the Petersburg Pines Restoration project is visible from key viewpoints such as County roads IC02 and IE003 and Forest Road. Other key viewpoints of the project area exist from hiking trails. The project area is also visible from smaller, graded Forest routes that travel through the action area however these are not considered sensitive viewpoints. Views in the action area vary from immediate foreground views comprised of many trees and the forest floor (Figure 6) to a foreground view of a creek corridor with a mountain peak rising in the middleground (Figure 3) to panoramic middleground views over the forested slopes of mountains within the Salmon Mountain range (Figure 7). Typically, views to the background do not exist due to the lack of a high enough vantage points that allow views over the surrounding terrain and tall vegetation in the foreground and middleground. Various activities can be seen
in the action area, such as small understory evidence of fire to large, neighboring burn scars such as that created by the Caribou fire in the Klamath National Forest. Unpaved or gravel forest roadways, minimal signage, a small number of recreation and operations related structures, and areas that have been selectively logged comprise the greatest visual presence of management activities.

**Figure 6. Forest Route 38N27 Looking East into the Forest**

Note that views are limited to the immediate foreground and are comprised of a dense forest stand and the forest floor.
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ICF 00760.09

Figure 7. Panoramic Middleground View over the Forested Slopes near China Gulch Trailhead

Scenic Stability

Scenic Stability is “the degree to which the valued scenic character and its scenery attributes can be sustained through time and ecological progression.” Valued scenery attributes can include water bodies, landforms and cultural features and vegetation features such as aspen groves, meadows, big tree character and open forest canopies, which are highly influenced by ecosystem changes and imbalances” (USDA Forest Service 2007). Major and Minor features such as terrain, rock outcrops, and water features are not likely to be greatly affected by factors such as fire or human activity; therefore, the conifer forests of the project area is the Major scenery attribute contributing to scenic stability. Table 3 defines the six levels of Scenic Stability. Because large areas of forest can easily be affected during catastrophic fire events and 60-90% of vegetation (dominant attribute) could be affected, the project area is considered to have a Very Low Stability. As described in the Fire and Fuels Specialist Report, fire suppression that started in the early 1930s has lead to a buildup of forest fuels that burn very differently during stable (e.g., some moisture, no winds) versus unstable (e.g., low humidity, high winds) atmospheric weather conditions, and steep topography creates a fuel ladder effect and roll-out, where burning material travels downhill and ignites more fuel. Factors contributing to the Very Low Stability include dense forest stands, high fuel loads, and topography that greatly increase the potential for fire that would drastically alter dominant scenery attributes.
### Table 3. Scenic Stability Levels

<table>
<thead>
<tr>
<th>Level of Stability</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>All dominant and minor scenery attributes of the valued scenic character are present and are likely to be sustained.</td>
</tr>
<tr>
<td>High</td>
<td>All dominant scenery attributes of the valued scenic character are present and are likely to be sustained. However, there may be scenery attribute conditions and ecosystem stressors that present a low risk to the sustainability of dominant scenery attributes.</td>
</tr>
<tr>
<td>Moderate</td>
<td>Most dominant scenery attributes of the valued scenic character are present and are likely to be sustained; a few may have been lost or are in serious decline.</td>
</tr>
<tr>
<td>Low</td>
<td>Some dominant scenery attributes of the valued scenic character are present and are likely to be sustained. Known scenery attribute conditions and ecosystem stressors may seriously threaten or have already eliminated the others.</td>
</tr>
<tr>
<td>Very Low</td>
<td>Most dominant scenery attributes of the valued scenic character are seriously threatened or absent due to their conditions and ecosystem stressors, and are not likely to be sustained. The few that remain may be moderately threatened but are likely to be sustained.</td>
</tr>
<tr>
<td>None</td>
<td>All dominant scenery attributes of the valued scenic character are absent or seriously threatened by their conditions and ecosystem stressors. None are likely to be sustained, except relatively permanent attributes such as landforms.</td>
</tr>
</tbody>
</table>


### 3.1.2 Recreation

The Petersburg Pines Project is located within the roaded natural (approximately 95% of the area), semi-primitive non-motorized (south of unit 146) and roaded (northwest corner of the project) ROS classes adopted in the Forest Plan. Within the roaded and roaded natural ROS classes, motorized access over primitive or primary access roads is permitted. The project area is bisected with numerous system and non-system roads. The project is located within Management Areas 10, 13, 15 and 17 with the applicable Standards and Guidelines described in more detail in Section 2.1 of this report.

Recreationists typically access the project area via State Highway 3 to Forest Route 93 and drive to Cecilville or travel up the East Fork of the Salmon River to the Summerville area. These two lane paved highways provide yearlong access to the project area where visitors have several options. The existing transportation system within the project area includes a network of roads and trails which facilitate recreation use in the general area. Most recreation use occurs along or near the existing transportation system due to the dense forest canopy and steep terrain.

Recreationists consist of consumptive and non-consumptive users. The consumptive user group is primarily hunters and woodcutters who constitute the majority of recreation users within the project area. The highest use period occurs during fall hunting seasons for black-tailed deer, black bear and Rocky Mountain elk where use levels range from low to moderate. This area provides a high quality hunting experience for those willing to venture away from the roads and trails. Low level hunting exists for upland game such as mountain quail, blue grouse, and wild
turkey. Woodcutting is the second consumptive use and is popular with the local residents and for those living in the Scott Valley or Yreka areas and traveling here to cut Douglas-fir and madrone. Woodcutting occurs yearlong but most activity is in the spring, summer, and fall months. Hunters tend to disperse throughout the project area while woodcutters concentrate along forest roads.

Non-consumptive uses are varied. Wildlife viewing is the most popular and is focused on viewing elk and birdlife. Scouting for hunting is a regular activity and viewing elk is a key viewing attraction. During the summer months, the South Fork area is considered a "hotspot" elk viewing area by the District Wildlife Biologist. This area is popular with the local residents, photographers, hunters, and non-consumptive users who simply enjoy viewing wildlife such as elk. This area serves as one of the best areas for the public to view elk in this herd. Bird watching is also gaining popularity in this area. While use levels are low, viewing resident and migratory birds in the wetlands area behind the Petersburg Station in the South Fork is a key viewing spot. Swimming in the South Fork is also popular with families during the summer months as the river provides some excellent swimming pools with easy access.

East Fork Campground (6 camping units) is located near the intersections of the South Fork and the East Fork of the South Fork of the Salmon River and serves as a staging area for the recreation activities in the area. Some use it as a base camp to fish the Salmon River further down river. Fishing use along the portion of the Salmon River within the project area is generally low except in the South Fork during the fall. Others are simply camping and sightseeing. Hunters use the East Fork Campground and the numerous areas of concentrated use and dispersed campgrounds throughout the project area.

Based on personal observations of District personnel, the majority of use is dispersed. Woodcutters are mostly day users while hunters are split between day use and overnight use. These observations are consistent with the National Visitor Use Monitoring Results (NVUMR) for the Klamath National Forest which indicates similar conclusions that more than 50% of the users travel 50 miles or less to recreate. Personal observations also indicate the project area is popular with Oregon hunters. Again, the NVUMR supports these observations with personal interviews with Jackson County, Oregon residents.

Four rustic trailheads (Garden Gulch, South Fork, China Gulch, and Cecil Lake) with informal interpretive services serve as staging areas for hikers, equestrians, and hunters to gain access into the Trinity Alps Wilderness. The Garden Gulch, South Fork, Rush Creek, Rays Gulch China Gulch, and Cecil Lake trails provide important access into the primitive settings of this wilderness.

### 3.1.3 Wild and Scenic River System-Recommended Recreational Rivers

The Klamath National Forest completed a WSR Study of the Environmental Impact Statement on the Klamath National Forest Plan which in part, determined that the South Fork-SS02 and the East Fork South Fork-ES02 and ES03 of the Salmon River within the project area held the following ORVs. These segments have been determined by the study to be suitable for inclusion into the WSR System as a Recreation Rivers. However, final decisions on the WSR designations
are reserved by Congress for itself, and they are not officially designated Recreation Rivers. In the interim, the Forest Plan has established Management Area 13 that provides Standards and Guidelines for designated and recommended Recreation Rivers, as described in more detail in Section 2.1.3 of this report.

Segment 2 (SS02) of the South Fork of the Salmon River (Blind Horse Creek to the Cecilville Bridge) is noted for its ORVs for fisheries and cultural resources. The fisheries resources include summer steelhead and spring Chinook salmon and this area receives heavy fishing during the fall and winter months. This segment also provides the best example on the Klamath Forest of a historical mining town site where the effects of hydraulic mining are still evident.

Segments 2 and 3 (ES02 and ES03) (Segment 2- Fish Lake Creek to Six Mile Creek) and (Segment 3-Six Mile Creek to its confluence with the South Fork of the Salmon River) has ORVs for water quality, fisheries and wildlife. Segment 2 is recognized for its high quality water ORVs while Segment 3 is recognized for its wildlife ORVs that include a Peregrine falcon eyrie, goshawk territory, and fisher and pileated woodpecker sightings. The fishery habitat supports summer and winter-run steelhead and a spring and fall-run for Chinook salmon.

### 3.1.4 Roadless Areas

A portion of the Orleans Mountain Roadless Area is located in the Cecilville area where the Record of Decision on the Forest Plan released this area for multiple use management. It is to be managed according to the management direction found in each management area. Approximately 1,223 acres of the Orleans Mountain Roadless Area is within the project area.

### 3.2 Direct, Indirect, and Cumulative Effects

#### 3.2.1 Alternative 1—No Action

**Direct and Indirect Effects**

The No Action Alternative would not directly affect the existing scenic character or VQO designations of the Petersburg Pines project area, because vegetation would remain largely intact as seen from sensitive viewpoints. However, the No Action Alternative could indirectly affect the project area’s scenic character by increasing the chance for catastrophic fire events, as consistent with Very Low Scenic Stability that could threaten the Scenic Integrity and VQO designation of Partial Retention. This would negatively affect Major and Minor scenery attributes associated with vegetative communities, destroying vast areas of living vegetation with catastrophic fire. It would also eliminate the presence of wildflowers, deciduous fall colors, and meadows and would, in-turn, negatively affect wildlife viewing through the destruction of habitat. These would be long-term effects until the forest could recover.

The No Action Alternative would not directly or indirectly affect the Petersburg Pines project area’s recreation settings, recreation values, ROS classes, the availability of the area’s recreation activities or the ORVs in the South or the East Fork of the South Fork of the Salmon River, as no treatment activities would occur.
Cumulative Effects

The No Action Alternative would not have direct cumulative affects to the existing scenic character or VQO designations of the Klamath National Forest or surrounding forest lands, because vegetation would remain largely intact as seen from sensitive viewpoints. However, the No Action Alternative could have indirect cumulative effects on scenic character by increasing the chance for catastrophic fire events that could threaten not only the Scenic Stability, Scenic Integrity, and VQO designation on the Klamath National Forest but also on surrounding National Forest lands and local communities. Catastrophic fires would likely cross the boundary of the project area and the Klamath National Forest, contributing to altering Major and Minor scenery attributes associated with vegetative communities across many acres of national forestland, negatively affecting the visual landscape. Catastrophic fires could destroy vast areas of living vegetation on the Klamath National Forest and surrounding forest lands. Such events would also eliminate the presence of wildflowers, deciduous fall colors, meadows, and other visual features and would, in-turn, negatively affect wildlife viewing through the destruction of habitat. These would be long-term, cumulative effects until the forest could recover.

The No Action Alternative would not directly or indirectly affect the Petersburg Pines project area’s recreation settings, recreation values, the availability of the area’s recreation activities, or the ORVs in the South or the East Fork of the South Fork of the Salmon River.

3.2.2 Alternative 2—Proposed Action

Direct and Indirect Effects

Visual Resources

To achieve the Proposed Action, variable density thinning of conifer stands would occur using tractors, helicopters, and a cable yarder system for steeper slopes; fuel treatments would be used to reduce potential for wildfire; 1,700 feet of road surface would be added to the permanent road system; 3,740 feet of existing road surface would be decommissioned in order to restore ecological function; and temporary roads and landings would be constructed for project implementation that would be hydrologically restored after the project is implemented. Logging, fuel treatments, and modifications for roadways would have negative direct and indirect effects on the scenic character by putting visible human modifications upon the landscape through project activities, in areas that appear to be very natural and largely absent of such modifications. This could include tall, remnant stumps where trees once stood; a forest floor without any pine needles but with trees that are scarred with fire; obvious evidence of grading activities, such as bare soil and cut and fill slopes; and obvious evidence of heavy machinery being used on the landscape through the presence of deep tire ruts and mounds (turn piles).

However, the Proposed Action includes resource design, or protection, measures for project activities that would be visible from sensitive viewing locations. These measures would reduce negative effects to visual resources by reducing and mitigating the appearance of disturbance and include:
- **Thinning by cable.** Minimize the difference in stand densities on either side of a cable corridor. Cover soil disturbance in cable corridors with debris, as needed, to retain a dominantly natural appearance (Partial Retention Visual Quality Objective Scenic Integrity/VQO) when viewed from sensitive viewpoints. This applies to the following Roadside Treatment Units treatment units: Unit 123 (County roads IC02) and Unit 117 (IE003), Unit 144 (Forest Roads 37N07) and Unit 127 (38N27). Thinning by cable also applies to units that have portions of official hiking trails crossing them and a Partial Retention Scenic Integrity/VQO. This applies to the following: South Fork and Rush Creek Trails (Unit 107), South Garden Gulch and Blind Horse Trail (Unit 48), Ray's Gulch Trail (Units 117 and 143-146), Cecil Lake Trail (Unit 120).

- **Treatment of unnatural-appearing soil disturbances.** Smooth piles of soil created by machinery or any other soil disturbance from machine piling within 75 feet from the following roads and units associated with key viewing areas: County roads IC02 (Unit 123) and IE003 (Unit 117), Forest Roads 37N07 (Unit 144) and 38N27 (Unit 127), South Fork and Rush Creek Trails (Unit 107), South Garden Gulch and Blind Horse Trail (Unit 48), Ray’s Gulch Trail (Units 117 and 143-146), Cecil Lake Trail (Unit 120).

- **Road actions.** Implement closure of new temporary roads, former logging access routes, and spurs to appear largely natural and not attract attention. Preferably, this is through the use of natural-appearing native boulder groupings, logs, and natural-appearing landforms, rather than unnatural-appearing dirt piles, trenches, signs, or gates.

Best Management Practice (BMP) measures such as for tractor skidding design, erosion control, and protection of meadows, streamcourses, and aquatic resources are also a part of the Proposed Action and would apply to visual resources in that they indirectly protect aesthetics and prevent impacts that would dominate the visual landscape during and after project implementation.

Project implementation would take at least 5 years to complete; however, the duration of time needed to go into any one treatment area and perform the proposed actions would take much less time. During project implementation, visual effects would occur and include movements, sounds, and smells that would direct attention toward activities taking place such as chainsaws cutting trees, trees being felled, tractors grading roadways or skidding logs, helicopters flying overhead with and without logs, truck activities, cable yarders dragging logs upslope, smoke from prescribed burns, burn scars, landings, and soil disturbances. These changes will be viewed differently, depending upon each individual's awareness and understanding of forest management activities. To the casual recreationist, activities associated with the proposed project could be viewed adversely as destruction habitat or a part of the forest which they may have enjoyed or it may be viewed as an interesting activity taking place within the forest. To the recreationist who understands forest management activities, they may still be adversely affected by the short-term deterioration of sites when heavy equipment and site alterations are taking place or they may have an appreciation for the purpose and need of fuel reduction treatment that will enhance their visual experience. However, once a unit has received its prescribed treatment, including scenery design treatments and BMPs, it would begin to naturally rehabilitate itself within 3 years as new needles drop, branches and crowns grow, and
herbaceous understory colonizes the floor of canopy openings. This would reduce the visual appearance of disturbance and meet long-term VQO designations.

In general, vegetation management activities such as variable density thinning and prescribed fires would not greatly alter the existing scenic character. Roadside fuel treatments would occur on a total of 25 miles along different selected roadways. This 200 feet wide buffer would apply the Stump Treatment and Treatment of Activity Debris design measures to avoid long-term adverse visual effects. Private land buffers would reduce the canopy to 60% cover for 100 feet surrounding and would apply the design measures to also avoid long-term adverse visual effects. Non-system road decommissioning (3,740 feet) would offset system road additions (1,700 feet), decommissioned roads would be restored and allowed to re-colonize with vegetation, new roads would be constructed to appear in visual keeping with existing forest roads, and there would be a net gain in lands returned to forestland. Therefore, there would be no adverse effects associated with decommissioned or new roadways. Fuel breaks have desired canopy cover of 40% and extend 600 feet down either side of the ridges where they are located. However, treatments to create fuel breaks would generally not reduce overstory canopy cover, but utilize hand work to remove understory trees and brush that are less than or equal to 10 inches in diameter. There would be low intensity burning of brush piles, prescribed underburns, and associated fire scarring that may be visible as people drive along forest roads or from trails. Most views towards the fuel breaks are limited by topography, vegetation, and absence of roadways or trails with views towards fuel break areas. Similar to other treatments, fuel break treatments would see natural rehabilitation within 3 years and if there effects are visible, they would be temporary and short-term in nature and meet long-term VQO designations.

**Scenic Integrity and Stability**

As described above, the Proposed Action would primarily result in short-term, temporary adverse visual effects. Scenery design treatments and BMPs are part of the Proposed Action and reduce the likelihood for permanent, long-term adverse affects. Furthermore, once a unit has received its prescribed treatment, it would begin to naturally rehabilitate itself within 3 years as new needles drop, branches and crowns grow, and an herbaceous understory colonizes the floor of canopy openings. This would reduce the visual appearance of disturbance and meet long-term Scenic Integrity/VQO designations. The Proposed Action would increase Scenic Stability by greatly reducing fuel loads and the potential for catastrophic fire events that would affect Major Scenery Attributes of vegetation cover. It would improve the Very Low Scenic Stability conditions to Low Scenic Stability. Even with the reduction of fuel loads resulting from the Proposed Action, wildfire could still greatly affect Major Scenery Attributes of vegetation.

**Recreation**

The Proposed Action would have mixed effects on the area’s recreation activities. There would be no effects on the availability and use of East Fork Campground or Garden Gulch, South Fork, Cecil Lake and China Lake Trailheads. With minor temporary exceptions, the transportation system roads and trails would remain open for public use during the lifetime of the project as provided for by design features. Users traveling system roads and trails could expect infrequent temporary delays especially at landing locations and with truck traffic on system roads.
proposed hazard tree removal along system roads would improve public and firefighter safety while traveling these roads and reduce the possibility of trees falling across these roads during their absence. Roadside fuel reduction treatments would improve the public’s ability to safely travel these roads and to evacuate the area during emergencies.

Felling hazard trees on Forest Service roads maintained for this project is consistent with the requirement of the Forest Plan, Federal Highway Safety Act, and the Occupational Safety and Health Administration. Users will notice the fuel treatments adjacent to developed sites and in those portions of the project areas they use or view. Due to the dense conifer and mixed hardwood overstory and understory, treatments and activities will be most evident along system roads and trails. The effects include tree removals, sights and sounds of helicopter, tractor, chain saw, and truck activities, evidence of logging and fuel treatment activities, residual burn piles, landings, soil disturbances, and smoke associated with prescribed burning. These changes will be viewed differently, depending upon each individual’s awareness and understanding of forest management activities. Many will have an enhanced recreation experience through an appreciation for the purpose and need of fuel reduction treatment. Others may see this change as diminishing their recreation experience when compared with the existing conditions.

Most adverse effects would be temporary such as the sights and sounds of logging equipment and these effects would immediately cease when the activity stops. The effects of fuel treatments tend to last into the long term (more than 5 years) and are mostly viewed as a positive environmental change which would reduce fire hazard, improve wildlife habitats and increase hunting and wood gathering opportunities. Users would expect to experience changes from the existing condition as described above. These would be most noticeable during hunting seasons which may result in temporary or seasonal displacement away from traditional hunting areas within active logging areas.

Hunters would continue to use their historic dispersed camping sites; however, they would experience a more open forest which would provide substantially improved access into additional hunting areas. Most hunters would see the fuel treatments including smoke from prescribed or pile burning as a needed habitat improvement which would enhance their recreation experiences beyond the short term (3-5 years). Several treatment activities would have a positive benefit to hunters. The proposed three shaded fuelbreaks along ridges south of Cecilville would provide substantial increased hunting access into the project area. The added hand and commercial thinning, mastication and prescribed burning would have the combined effect of creating more open and available areas in which to hunt. Finally, the residual temporary skid trails and temporary roads would provide increased foot access into more remote hunting areas.

Recreationists traveling the system roads would view a more open forest with increased opportunities to view wildlife. A similar experience would be evident while hiking or riding on system trails. Woodcutters would immediately have access to substantial stockpiles of non-commercial firewood, especially along forest roads and at roadside landings. The increased wood supply would likely attract additional woodcutters into the area. These benefits would extend beyond the short term (3-5 years). The Klamath National Forest Motorized Travel
Management Plan (July 2010) authorizes combined non-highway and highway vehicle use on Forest Road 38N01 which serves as an important public access route into the project area. This recent change would likely change the mode of travel for some woodcutters and hunters using the area. However due to its remote nature, primary user patterns would not likely change and the level of recreation use would not measurably change. Potential social or safety conflicts would be unknown.

A substantial number of short-term recreationists camp outside the East Fork Campground in dispersed camping areas within the project area. Careful placement of landings away from known dispersed campsites, which is not a design feature but would occur during the implementation phase, would reduce or eliminate potential conflicts with users.

Implementation of fuel treatments in this alternative would have immediate, short- and long-term positive effects on the quality and quantity of big game habitats. As the forest canopy is modified, the more open forest would create immediate sprouting and seed growth responses from native shrubs, grasses, and forbs. Black-tailed deer would immediately be attracted to the sprouting shrubs and forbs while Rocky Mountain elk would favor the new grasses and forbs. The improved wildlife habitats would immediately create substantially improved hunting opportunities and experiences for both deer and elk hunters and these would extend into the short and long terms. The potential long-term benefit of this alternative is a possible increase in elk populations which could result in an increased number of elk tags issued for the Marble Mountain Elk Zone. This alternative has the informal and formal organizational support of local chapters of The Wilderness Society, Rocky Mountain Elk Foundation, California Deer Association, and the National Wild Turkey Federation. Collectively, these organizations are very supportive of this project with some actively participating in its scope and design. These key organizations represent active users within the project area. In addition, the proposed action would be responsive to the objectives of the Klamath National Forest’s Elk Habitat Strategy.

Wild and Scenic River System-Designated and Recommended Recreational Rivers

The proposed design features and BMPs would serve to protect the existing river integrity and ORVs of the affected segments of the Salmon River which are recommended for inclusion into the WSRs System. There would be no direct or indirect effects on the ORVs or the river’s suitability for inclusion into the WSRs System.

Roadless Areas

Proposed treatment within the roadless area is limited to prescribed burning in portions of units 106, 117, 149, 143, 144, 146, and 147 and roadside fuel treatments in portions of units 117, 146 and 149 totaling approximately 1,223 acres. No other treatments are proposed. The effects of this action would substantially reduce fuel loading and improve wildlife habitats. The indirect effect would serve to reduce the potential of a high intensity wildfire from burning into the Trinity Alps Wilderness which lies approximately 3,000 feet immediately south of this project. This action is consistent with the management are directions for roadless areas.

This alternative is consistent with the applicable Standards and Guidelines for Management Areas 10, 13, 15 and 17 and with the Forest-wide Standards and Guidelines of the Forest Plan. The proposed decommission of 3,740 feet of existing non-system road in Ray’s Gulch and the
addition of approximately 1,700 feet of Road (38N01) in units 32 and 70 would have no effect on the ROS classes. The ROS classes would remain unchanged from the existing condition.

Cumulative Effects

The impacts of past and current human actions are reflected in the current conditions of the project area and these are expected to continue. Proposed vegetation treatments would result in timber stands which closely mimic the historic conditions which have an open landscape character. Low intensity ground fire would become a periodic activity with the risk of an intensive wildfire being reduced. The temporal cumulative effects to recreationists (especially hunters) would extend over the life of the combined projects with the greatest benefits occurring within the first five years after treatment when modified fuels would provide improved forage and access. The spatial cumulative effects would include projects within the Petersburg Pines Restoration Project area and other projects that are adjacent to it which provides motorized access to all recreation user groups.

Currently foreseeable fuels projects include the the Caribou projects which propose nearby similar benefits to wildlife habitat and the protection of visual resources and thus to recreationists who view nature and wildlife or hunt wildlife. In addition, the Proposed Action would reduce potential to spread fire events from one area of forest to another and aid in maintaining Major and Minor Scenery Attributes for the Klamath and surrounding National Forest lands. The KNF recently approved the Travel Management EIS, which modified vehicular access to some of the camping facilities in the project area. However, the Petersburg Pines Restoration Project, in conjunction with the reasonably foreseeable actions (see Chapter 1) would not contribute to any cumulative effects. The cumulative effects would result in a substantially improved wildlife habitat with increased opportunities for hunters and recreationists enjoying the outdoors.

3.2.3 Alternative 3

Direct and Indirect Effects

Direct and indirect effects to visual resources for Alternative 3 are similar to those for Alternative 2. Alternative 3, however, would generally reduce the magnitude of short-term adverse visual effects by reducing the amount of heavy machinery that would be seen in some riparian reserve areas and limiting activities to hand treatments and prescribed burns. The effects of burning would still be evident, but like Alternative 2, once a unit has received its prescribed treatment, it would begin to naturally rehabilitate itself within 3 years as new needles drop, branches and crowns grow, and an herbaceous understory colonizes the floor of canopy openings. Like Alternative 2, this would reduce the visual appearance of disturbance and meet long-term Scenic Integrity/VQO designations. Alternative 3 would also increase Scenic Stability by greatly reducing fuel loads and the potential for catastrophic fire events that would affect Major Scenery Attributes of vegetation. It would improve the Very Low Scenic Stability conditions to Low Scenic Stability. Even with the reduction of fuel loads resulting from the Alternative 3, fire could still greatly affect Major Scenery Attributes of vegetation.
For Recreation, the East Fork Campground and the four trailheads would remain open similar to Alternative 2. There would not be a noticeable change in the temporary adverse effects experienced during all phases of fuel treatments proposed in Alternative 2. Hunters would see and access a more open forest when compared with Alternative 1 and there would not be a noticeable difference when compared with Alternative 2. Travel to trailheads, wood gathering spots and hunting areas on system roads and trails would be similar to Alternative 2 and substantially improved from Alternative 1. The added public safety and visual benefits of fuel treatments along system roads would remain unchanged from Alternative 2.

Similar to Alternative 2, the positive benefits of fuel treatments would extend beyond the short-term (3-5 years) and into the long-term by facilitating substantially improved hunter access into the project area.

This alternative is consistent with the applicable Standards and Guidelines for Management Areas 10, 13, 15 and 17 and with the Forest-wide Standards and Guidelines of the Forest Plan. The proposed decommission of 3,740 feet of existing non-system road in Ray’s Gulch and the addition of approximately 1,700 feet of Road (38N01) in stands 32 and 70 would have no effect on the ROS classes. The ROS classes would remain unchanged from the existing condition.

**Cumulative Effects**

Cumulative effects for Alternative 3 are the same as those for Alternative 2.
Chapter 4
Consultation and Coordination

The following individuals, agencies, and organizations were consulted during the preparation of this report.

4.1 Agencies

U.S. Forest Service, Klamath National Forest
Bob Talley, Landscape Architect
Sam Cuenca, Wildlife Biologist
Chapter 5
References

5.1 Printed References


