



United States Department of Agriculture

Decision Notice and Finding of No Significant Impact for the Grizzly Fire Salvage & Restoration Project



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Introduction

An interdisciplinary team from the Idaho Panhandle National Forests (IPNF) completed the Grizzly Fire Salvage and Restoration Project Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. The team conducted the environmental assessment according to Council on Environmental Quality regulations (40 CFR 1508.9(a)), which state: “Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.”

This decision notice describes the details of my decision to proceed with the Grizzly Fire Salvage and Restoration Project, background information about the project, and the rationale supporting my decision. This document also includes my finding of no significant impact (FONSI) to the human environment, which documents that no further environmental analysis is necessary to proceed with this project.

The Grizzly Fire Salvage and Restoration Project EA, supporting resource reports and biological assessments are incorporated by reference into this document. These documents are part of the project record and available upon request.

Project Location

The project area (see Figure 1, Vicinity Map) is located north of Enaville and west of Prichard, Idaho, in the North Fork Coeur d’Alene River drainage, and consists of National Forest System (NFS) lands within the perimeter of the Grizzly Complex Fire, Shoshone County, Idaho (portions of T50N-R2E; T50N-R3E; T51N-R2E; T51N-R3E; T52N-R2E; T52N-R3E; Boise Meridian). A large-scale map and other documents providing information about this project are available on the project website: <http://www.fs.usda.gov/project/?project=48585>.

Background

In 2015, nearly 300 wildfires impacted tens of thousands acres on National Forest System lands in northern Idaho. Approximately 47,500 acres burned on the IPNF and over 25,000 of that was in the Grizzly Complex itself; of those 25,000 acres, approximately 14,500 make up the project area.

The Grizzly Complex Fire consisted of six individual lightning-caused fires that started during storms on August 10 and August 22, 2015, were managed as one incident until they were declared out in late October 2015. These fires ultimately accounted for nearly 90 percent of the total acres burned on the Coeur d’Alene River Ranger District in 2015.

All but 116 acres (private lands within the perimeter of the Lower Flat Fire) burned on National Forest System (NFS) lands. Activities are proposed in three of the fire perimeters: Grassy (860 acres), Lower Flat (8,295 acres), and North Grizzly (5,325 acres), as displayed in Figure 1.

Purpose and Need for Action

The purpose of the Grizzly Fire Salvage and Restoration Project is to protect the health and safety of the public, recover some forest product economic value and benefit, and accelerate restoration in portions of the landscape burned by the Grizzly Complex fires. Removal of the burned trees would also prepare the area for safe and timely reforestation with desired early seral tree species. Reforestation would expedite the re-establishment of a forested landscape with appropriate early seral tree species; i.e. western white pine and western larch.

These actions are needed because the existing conditions in the burned area deviate from the desired future condition as described by the 2015 Idaho Panhandle National Forests Management Plan (Forest Plan). The differences exist in a variety of resource areas, but are most pronounced in the areas of public safety, forest resiliency, and contribution to local economies from forest products.

Desired conditions for the area are as follows:

- Provide a safe and dependable transportation system free of unstable fire-affected trees or other hazards in areas of public and administrative use. Currently, roads within the fire perimeters have a heightened risk of danger trees falling, blocking access and threatening public and employee safety. The Forest Plan desires a transportation system that provides safe and efficient public and administrative access to the Forest (FW-DC-AR-07). Over time, additional danger trees would continue to fall because of increased defect, death, weathering agents, heavy snow, and other environmental factors. With existing and predicted risk, there is a need to remove danger trees along specific routes to improve safety for forest users.
- Re-establish and restore forested conditions to trend the project area toward Forest Plan desired conditions; in particular, increase the representation of early seral conifer species. The current composition of the forest, both at stand and landscape levels, deviates from desired conditions identified in the Forest Plan. Instead of having more of the forest dominated by western white pine, ponderosa pine, and western larch (FW-DC-VEG-01) that are more resistant to drought, fire and insects, current forest composition in the project area is dominated by less resilient western hemlock, grand fir and Douglas-fir trees. Planting native tree species (e.g. blister rust-resistant white pine and western larch) in the salvage units and the roadside danger tree removal areas after harvest and site preparation activities are completed would hasten and enhance the overall recovery process, meet restoration objectives, and trend the vegetation component toward desired future conditions.
- Recover the economic value of forest products in a timely manner to contribute to employment and income in local communities. As described by Forest Plan (FW-DC-TBR-01), it is desired that salvage of dead and dying trees capture as much of the economic value of the wood as possible while retaining the amount needed for wildlife habitat, soil productivity and ecosystem functions as described in the Proposed Action. The proposed salvage units occur in stands where it is estimated the dead and dying trees have enough merchantable timber to provide an economically viable timber sale that would capture the commodity value necessary to accomplish project objectives while contributing to employment and income in local communities. A time sensitive and viable sale is critical to ensure that project objectives can be accomplished.

A number of research studies have demonstrated that insects (primarily beetles), stain and decay fungi, and weather all act as deterioration agents in fire-killed timber. Deterioration of the fire-killed and damaged trees has a number of impacts. Lumber quality is reduced, merchantable volume of wood (and therefore, value) is reduced and most importantly, the deteriorating dead trees pose substantial safety hazards to the public and forest workers. Consequently, the ability of the Idaho Panhandle National Forests to accomplish the purpose and need for the project is strongly tied to the timing of the salvage harvest and danger tree removal.

Decision and Reasons for the Decision

My Decision

Based upon my review of all alternatives, I have decided to implement Alternative 2, described in more detail in Table 1 and the following sections (see also the enclosed Selected Alternative map).

This alternative includes salvage operations, danger tree removal along roads and trails, reforestation, temporary road construction and rehabilitation, and road maintenance as described in the “Proposed Action” section of the environmental assessment.

Table 1. Summary of activities under the selected alternative.

Management Actions	Alternative 2
Roadside danger tree removal	27 miles (1,325 acres)
Salvage harvest	1,700 acres
Tree planting	1,837 acres
Road maintenance	117 miles
Temporary road construction	5 miles

Details of the Selected Alternative

Danger Tree Treatments

Within the project area, there are approximately 27 miles of roads open to public and/or administrative use that have a heightened risk of danger trees falling, blocking access and threatening public and employee safety. To improve safety during project operations and for the public, individual danger trees (both green and dead) will be removed within 200 feet on either side of routes designated for public motorized use (except in RHCAs), existing roads not designated for public motorized use which would be opened and used as haul routes, and limited portions of non-motorized public trails within the Grassy and Lower Flat fire perimeters.

These roadside danger tree treatments will only take place outside the salvage harvest units along an estimated 27 miles of road and totaling approximately 1,325 acres, including approximately 254 acres within riparian habitat conservation areas (RHCAs), where trees will be felled but not removed. Within RHCAs, danger trees will be felled and left on the ground, unless these down trees pose a risk to blocking road drainage structures (i.e., excessive tree crowns or branches above a culvert inlet). In these instances, trees will be moved elsewhere in the RHCA by equipment that does not leave the road surface (or is located outside the riparian habitat conservation areas). All coarse woody debris requirements will be met within the danger tree treatment areas as described in the Forest Plan (FW-GDL-VEG-03).

The 200-foot width was determined to be appropriate for the danger tree removal buffer based on average maximum tree heights and hillslopes. Mature trees on the Forest are often greater than or equal to 120 feet in height and occasionally exceed 150 feet in height. Trees falling on steep slopes can travel down slope further distances than their height alone would indicate. In addition, falling trees can strike other trees as they fall, causing a “domino effect”. When this occurs, sections of trees can strike the ground at distances further than the original trees would have reached. The 200-foot buffer width will address these hazards to travel routes better than would a shorter distance. Only trees with the potential of striking the route will be felled.

Danger trees will be selected for removal based on their risk of falling and likelihood of striking an established road or trail if they do fall. More trees will likely be removed above a road, where there is greater risk of the tree falling down into the road, than from below the road. Identification of danger trees will follow the Field Guide for Danger Tree Identification and Response (Toupin et al. 2008); the trees that are classified as having imminent or likely failure potential would be felled.

Salvage Operations

We will salvage harvest timber on approximately 1,700 acres. Many of the larger-diameter grand fir and western hemlock present in these stands will be retained because they have substantial defect from Indian paint fungus and other damage agents, which makes them valuable for numerous wildlife species and also contribute to Forest Plan snag and coarse woody debris retention guidelines and desired conditions. Western larch, Douglas-fir, cedar and white pine are also present. Where present, these species will be preferentially retained, unless they pose a safety hazard during logging operations or their removal is required incidental to location of skid trails or skyline corridors. As such, cutting designations for this project will focus on removal of trees less than 32-inches diameter at stump height.

Although the minimum number of snags and snag recruitment trees specified for retention varies according to a number of different factors (see Table 4 associated with FW-GDL-VEG-04, p. 20 of the Forest Plan), a minimum of five to seven snags per acre and one to six live trees per acre (where live trees are available) for snag recruitment will be left in most of the salvage units. In units with more live trees per acre, those trees will also be left if it is determined that they are not likely to succumb to secondary agents.

Prior to the wildfires, there were 3,265 acres that met the Forest Plan definition for old growth in the North Grizzly, Grassy and Lower Flat fire perimeters. Based on initial observations by a certified Forest Service silviculturist, these stands no longer meet the old growth definition. They do not contain enough live trees per acre that are both old enough and large enough, and/or do not contain enough total live trees per acre to meet the minimum old growth criteria as defined by Green et al. (2011).

During project development, any pre-fire old growth stands found to still meet the old growth definition were dropped from proposed salvage units. Of the 3,265 acres that met the old growth definition before the fire, approximately 533 acres will have salvage harvest under the selected alternative. Within the burned areas, grand fir, western hemlock and Douglas-fir were the most prevalent tree species in stands designated as old growth prior to the fires.

Reforestation

The selected alternative includes approximately 1,837 acres of tree planting. Reforesting the burned areas with native tree species will enhance the overall recovery process and trend the vegetation component toward desired future conditions, as stated in the purpose and need for action. Tree seedlings will be planted in the salvage units and in the roadside danger tree removal areas following the completion of harvest activities. Tree seedlings will also be planted in areas within or adjacent to the units where treatments are not being conducted and where the fire burned with enough severity that adequate openings in the forest canopy were created to allow successful growth of the planted trees (such as in riparian habitat conservation areas). See the environmental assessment and Forest Vegetation Specialist Report for more details on the tree species to be planted.

Transportation

The implementation of the selected alternative will require building approximately five miles of temporary roads to facilitate harvest activities. Temporary roads are those that are constructed to access landings and are rehabilitated upon completion of all harvest activities. The temporary roads will be recontoured after use to the approximate shape of the surrounding terrain. These roads will also be closed to the general public using berms, gates or debris placed near the entrance and along the first portion of the road. These temporary road segments are generally on dry ridgetop locations and are not located in wet or moist areas.

Road maintenance and reconstruction is needed along the haul routes to implement the proposed action. To support large trucks and equipment, some road reconstruction and typical road maintenance will need to occur on approximately 117 miles of existing National Forest System roads. These activities will include clearing brush from the road shoulders to improve sight distance, blading and shaping the road, cleaning ditches, maintaining or improving drainage structures, and improving the road surface. Snowplowing along these roads may be required to complete winter logging operations or reforestation activities. The environmental assessment provides more details on the road work needed to implement this project.

Design Features

The interdisciplinary team identified design features to minimize or avoid potential adverse effects from the proposed action. The design features are based on Forest Plan direction and policy, best available science, and site-specific evaluations; and will be applied (except where specifically stated) during project implementation. The project design features can be found in Appendix A of this decision. These are an integral part of this project and are required to be applied to the selected alternative during project implementation.

Rationale for this Decision

When compared to the other alternatives, I believe that my selected alternative represents a more balanced approach to achieving the purpose and need for action, responding to the desired conditions in the Forest Plan and addressing public concerns more than the other alternatives. My decision was based on a thorough review of the environmental assessment and supporting documentation, and with consideration as to how well each alternative achieves the purpose and need for the project and address the public comments and issues that were raised. As explained below, I believe Alternative 2 best meets those decision criteria.

Achieving the Purpose and Need for Action

The overall purposes of this project are to protect the health and safety of the public, restore portions of the landscape burned by the Grizzly Complex Fire, and recover the remaining forest product economic value and benefit. I believe that the selected alternative reflects the integration of effective land management objectives at a very high standard and fully meets the purpose and need for this project.

This project will provide a long-term beneficial effect to public health and safety by improving public, administrative, and operational safety along the National Forest System roads within the project area. I believe this is a key component of this project; removal of roadside danger trees in a timely manner is essential for providing safe access to the area for the visiting public as well as Forest Service employees and contractors. The road systems in this area are used by the public for recreational uses throughout the year. Recreational activities include hunting, dispersed camping, hiking, viewing scenery and wildlife, off-highway vehicle use, snowmobiling, and gathering of special forest and cultural products (such as huckleberries and mushrooms). In addition, these road systems are crucial to providing access to Forest Service employees for future land management and fire suppression activities in this area.

Trees that posed immediate hazards were removed during fire suppression activities to provide a safe working environment for firefighters. These activities, however, did not mitigate concerns related to the trees that will become hazards in the upcoming field seasons, as they rapidly become weakened as a result of their fire injuries and winter weather. If the danger trees are not removed, most of the roads and trails in the project area will become unsafe for use by the general public and Forest Service employees. My decision will allow for removal of many of these hazards in the upcoming 2016 field season, before major tree deterioration takes place with its accompanying increase in safety risks to those felling the trees and to the public if they are not removed.

In the Grizzly project area, there is a need to increase blister-rust resistant western white pine, western larch, ponderosa pine, and in some instances, western redcedar. There is a corresponding need to reduce the more insect and disease prone, fire and drought susceptible, generally shorter living grand fir, western hemlock, lodgepole pine, Douglas-fir and subalpine fir. One way to help accomplish this is to reforest the burned area with the species that are more resistant to diseases and more resilient to fire.

Western white pine is considered a “keystone” species to the warm/moist forest ecosystem of the inland northwest. White pine was clearly underrepresented in the project area prior to the 2015 fires and there is no reason to expect it to increase in representation in the coming years without intervention due to the lack of blister rust resistant seed on the burned sites. However, the recently burned warm/moist sites that occur within the Grizzly Complex provide an excellent opportunity to help to increase the amount of white pine that is resistant to blister rust in that area. Reestablishment of western white pine (as well as western larch and ponderosa pine) is important relative to resistance and resilience within the burned areas because it is better adapted to survive potentially warmer and drier future climates that include longer summer droughts and higher frequency disturbances than grand fir and western hemlock in particular.

Reforesting the burned areas with resilient native tree species, which are more apt to cope with stress complexes in the future, will enhance the overall recovery process and trend the vegetation component toward desired future conditions (EA, Forest Vegetation). On the moist sites, western white pine seedlings that are resistant to the blister rust disease will be planted. In addition, if the

moist sites are open enough to support shade-intolerant species, western larch will be planted. On drier sites, ponderosa pine and western larch seedlings will be planted. Lastly, in very moist riparian settings, western red cedar will be planted. If this does not occur, site preparation from the fire activity will be lost on these moist sites since competing vegetation will dominate sites within a very short timeframe and make it nearly impossible to replant shade-intolerant species successfully (EA, pages 15-16). Thus, it is imperative these actions be swift in order to take advantage of the natural site preparation followed by fuel removal, and to take advantage of higher bid values to help fund reforestation. It is very important to reforest promptly to create a more resilient forest after wildfire, as shown in the Northern Region Reforestation Strategy (Bollenbacher et al 2015). My decision will reforest approximately 3,496 acres with more resilient native tree species.

The selected alternative also recovers some of the remaining forest product economic value and benefit, which is important to achieving funding resource restoration and achieving the overall project objectives. My selected alternative will produce an estimated 30 million board feet. At least 50 percent of the value from the timber sales is proposed to fund the reforestation.

Addressing Public Concerns

I feel the selected alternative reflects all comments received throughout the planning process, including those received during the comment period, discussions at the open house, meetings with interested groups and citizens, and the public field tour (EA, Appendix A). The selected alternative balances the comments received from all stakeholders. Some of the comments that provoked the most discussion were related to pre-fire old growth and temporary roads.

Pre-fire Old Growth

My selected alternative will treat 533 acres of pre-fire old growth (stands that were designated as old growth prior to the fire) in the salvage units. These stands no longer meet the definition of old growth, as defined by the Forest Plan. The Idaho Panhandle National Forests staff has adopted the definitions of old growth types that were developed by the Northern Region Old Growth Task Force, and documented in Green et al. (1992), as described earlier. No salvage operations will occur within any stands that meet this definition of old growth. All pre-fire old growth stands within salvage units that are included in my decision have been field verified and do not include any stands meeting this definition of old growth.

About 12,393 acres of old growth stands burned across the Idaho Panhandle National Forests in 2015. A total of 864 acres or 7 percent of these stands are being proposed for post-fire salvage (not including roadside danger tree removal) in salvage sale projects on the Idaho Panhandle National Forests.

Prior to the wildfires, there were approximately 3,265 acres that met the definition for old growth (Green et al. 1992, Zack et al 2011) in the North Grizzly, Grassy and Lower Flat fire perimeters. This project will treat 4 percent of all old growth stands (pre-fire old growth) that burned on Idaho Panhandle National Forests and 16 percent of the pre-fire old growth acres that burned in the project area. Under the selected alternative, the salvage harvest will retain any live trees expected to survive, as well as enough snags within salvage units to meet or exceed Forest Plan guidelines. Although the quality and quantity of habitat will be reduced, approximately 9,858 acres (78% of the existing level) of high quality habitat will still be available to support snag-dependent species, including black-backed woodpeckers. The remaining stands of pre-fire old growth will not receive any treatments, and will continue to function as wildlife habitat and to recover naturally.

I have reviewed the impacts associated with treating these pre-fire old growth stands. None of the impacts analyzed and disclosed in the environmental assessment are significant. I believe my decision represents a balanced approach to the public comments that request us to treat as much of the dead and dying trees as possible with those that requested that all pre-fire old growth stands remain untreated.

Temporary Roads

My selected alternative includes building approximately five miles of temporary roads to facilitate harvest activities. These temporary roads will be completely rehabilitated soon after salvage operations in the associated units has been completed; this should occur before the following spring runoff season. The temporary roads will not remain open for reforestation activities.

To minimize impacts to the environment and natural resources, previously-disturbed areas are used whenever possible, including old temporary or non-system road locations. Some of these temporary road locations, however, do not overlap with old temporary roads or other road alignments, as requested during the comment period. The impacts of building and using these temporary roads was fully analyzed and disclosed in the environmental assessment, including impacts to wildlife species and sedimentation. See the Wildlife, Hydrology and Soils Specialist Reports as well as the Wildlife Biological Assessment for more details.

I have reviewed the impacts associated with these temporary roads. None of the impacts analyzed and disclosed in the environmental assessment are significant. As such, I believe my decision represents a balanced approach to the public comments that request us to reduce the amount of temporary roads constructed and need to construct these roads to facilitate the harvesting of forest products.

Other Alternatives Considered

In addition to the selected alternative, I considered two other alternatives. A comparison of these alternatives can be found in the environmental assessment (Table 3 and by resource in the Environmental Effects section).

During development of this project, the interdisciplinary team considered three other alternatives to the Proposed Action that were not developed for detailed analysis:

- *Salvage the entire burned area.* While this alternative would accomplish the need for recovering economic value of the timber burned in the fire, it would not achieve the balance of sustainability between economic returns and ecological values. It would require a considerable amount of temporary road construction, which is not consistent with desired conditions. Therefore this alternative was eliminated from further consideration.
- *Helicopter use to maximize salvage opportunities.* The use of helicopters for salvage was considered by the Forest Service early in the planning process. This option would increase the accessible acreage for salvage without having to build any more roads. Due to the extreme cost involved with helicopter logging, this alternative was eliminated from further consideration.
- *Combine the salvage harvest with a green tree harvest to increase the economic value of the timber sale.* While this alternative would address the need to recover the economic

value of the burned timber, in order to include any substantial quantity of green timber it would require a larger analysis area and a longer, more complex analysis. Burned timber decays and loses economic value rapidly, and the potential to recover the value in the fire salvage portion of such an alternative would be compromised by the longer time necessary for this more complex assessment. Therefore this alternative was not taken forward into detailed analysis.

Alternative 1 – No Action

The No-Action Alternative is the baseline for comparative analysis of the effects of the action alternatives. For this project, analysis of the No-Action Alternative represents the effects of implementing only the felling of danger trees along roads (a total of 864 acres), an administrative action that would occur regardless of the proposed action, to improve public safety while taking into account the effects of past, ongoing, and reasonably foreseeable activities. None of the salvage operations or reforestation activities associated with the action alternatives would take place, addressing to some extent the concerns cited in four letters opposing the project and/or recommending that the area be left to heal on its own over time. The no-action alternative would not preclude activities already approved in this area or activities planned as separate projects.

I did not select this alternative for implementation because it would not achieve the purpose and need for action. Even though some imminent danger trees could be dealt with through the roadside danger tree removal, it would be difficult to stay pro-active with this activity as more and more trees become a hazard over time. Due to the unpredictable nature of when a danger tree falls, leaving a high number of them along roads and trails could create unsafe road use and travel and conditions for anyone who uses the area for years into the future.

By not planting the desirable tree species on any of the burned areas as would the action alternatives, Alternative 1 would not increase the resistance and resilience of the forest vegetation to disturbance and stressors, and therefore forgo a substantial opportunity to trend the composition towards the desired conditions that are described in the Forest Plan. Specifically, Alternative 1 would fail to help achieve the following goals, desired conditions and objectives in the Forest Plan: GOAL-VEG-01, FW-DC-VEG-01, FW-DC-VEG-03, FW-DC-06 and FW-DC-VEG-10.

In addition, this alternative would not meet the following objective that was established for this project: Re-establish and restore forested conditions to trend the project area toward Forest Plan desired conditions; in particular, increase the representation of early seral conifer species such as western white pine, ponderosa pine and western larch.

Without any salvage harvests, Alternative 1 would not generate any economic value. The roadside danger tree removal would most likely be completed through a service contract with an estimated cost of approximately \$121,910; with no commercial timber harvest under Alternative 1, no revenues would be collected to pay for the work.

Therefore, I did not select Alternative 1 because it only responds to one of three of the needs for this area, and would not trend toward desired conditions described in the Forest Plan.

Alternative 3

Alternative 3 was designed to address issues raised during the public comment period related to harvesting pre-fire old growth stands and temporary roads. All stands that were designated as old growth prior to the 2015 Grizzly Fire were dropped from the salvage operations in this

alternative. Some additional acres were dropped if the remaining unit(s) became infeasible to salvage after the pre-fire old growth was dropped. In addition, the five miles of temporary road construction proposed under Alternative would be dropped under this alternative. Since it was assumed that salvage units would address danger tree removal where they occurred within 200 feet of identified motorized routes, when the salvage units in pre-fire old growth were dropped from Alternative 3, it was necessary to add danger tree treatments to roadside areas that were no longer within salvage units. As a result there are more acres of danger tree removal proposed in Alternative 3 than there are in Alternative 2.

I did not select this alternative for implementation because, while both Alternatives 2 and 3 would improve public safety as a result of roadside danger tree removal and neither alternative would have significant effects to any resource; Alternative 2 would be more effective in trending forest stands toward desired conditions, and have greater economic benefits than Alternative 3.

Emergency Situation Determination

As part of this project, we requested and received an emergency situation determination (ESD) to address the hazards threatening health and safety along roads and trails within the project area, and to capture the commodity value necessary to accomplish project objectives. As such, we expect to begin salvage harvesting and danger tree removal activities in July 2016.

The ESD was requested pursuant to 36 CFR 218.21 (78 Federal Register 59, March 27, 2013). Only the Chief and Associate Chief of the Forest Service may grant an ESD (36 CFR 218.21(a)). An emergency situation is a situation on National Forest System lands for which immediate implementation of a decision is necessary to achieve one or more of the following: relief from hazards threatening human health and safety; mitigation of threats to natural resources on National Forest System or adjacent lands; avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration (36 CFR 218.21(b)).

I recognize that the ESD changed the public involvement for this project. In order to receive public input and keep the public informed throughout the process, we started public involvement early and have plans to continue meeting with interested groups and members of the public throughout the project. One field trip to the project area occurred earlier this month; additional field trips and meetings will be held as needed and requested to ensure that all public concerns have been adequately addressed.

I considered all the comments received, including those that do not support the ESD request. After reviewing comments and weighing them against the data and analysis provided by the interdisciplinary team, I believe the ESD request was needed and appropriate to achieve the purpose and need for this project; the Chief of the Forest Service concurs with my rationale. All the ESD documentation, including the Chief's concurrence, is available on the project internet site: <http://www.fs.usda.gov/project/?project=48585>.

Public Involvement and Tribal Consultation

This project was first described in January of 2016 on the Forests' public website (<http://www.fs.usda.gov/projects/ipnf/landmanagement/projects>). The combined scoping and 30-day notice and comment period was initiated on January 29, 2016. A legal notice for the 30-day comment period was published in the Coeur d'Alene Press newspaper on January 29, 2016. The

Forest Service formally notified the public of the Emergency Situation Determination request in both the letter to the public and associated legal notice. The comment period letter was mailed to approximately 330 interested individuals and groups, including state and local government agencies, elected officials, tribal representatives, environmental advocacy groups, adjacent property owners, recreational groups, and the general public. Project information and documents were also posted on the project website.

We received 79 comments from individuals and organizations (EA, Table 2 and Appendix A). This included 48 supportive form letters generated from Healthy Forest, Healthy Communities and 21 supportive comments from other individuals and organizations; this represents 90 percent of the comments received. Four comments were unsupportive of salvaging and requesting an ESD, and another six had specific questions or requested changes in the proposed action or additional analysis. As a result of the comments received, another action alternative was analyzed that would not treat stands designated as old growth prior to the fire and would not include any road construction (Alternative 3).

A public meeting was held on February 17, 2016 to discuss the project. The public was notified of this meeting in the comment letter, legal notice and through social media. Twenty-one members of the public attended the open house.

A field trip to the area occurred on June 10, 2016. The group, which included eight members of the public, spent the day in the project area, with stops made to observe the landscape from a distance, to look at stands that were excluded from treatment, and to view conditions in proposed salvage units. The views generated discussions of fire mortality (especially in thin-barked trees), pre-fire old growth (as well as existing old growth stands that were dropped from treatment), roadside danger tree removal, and reforestation opportunities.

In addition to the public involvement, the Forest has been coordinating with other government agencies, including Shoshone County Commissioners, Idaho Departments of Environmental Quality, Fish and Game, Lands, and Parks and Recreation.

Finding of No Significant Impact

The determination of whether a project may have a significant effect on the environment calls for careful judgment and needs to be based on scientific and factual data presented in the environmental assessment and accompanying resource reports. The mere presence of an adverse effect does not equate to the potential of a significant impact as a determination needs to be made that considers both the context and the intensity of an impact. Thresholds associated with significance are sometimes clearly established through law and regulation, such as water quality and air quality standards. Other times identifying the significance threshold is not definitive and requires professional judgment regarding the duration and the extent of the impact on a resource.

The following is a summary of the project analysis to determine significance, as defined by Forest Service Handbook 1909.15_05. "Significant" as used in NEPA requires consideration of both context and intensity of the expected project effects.

Context

The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action,

significance usually depends upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant (40 CFR 1508.27).

The 2015 fire season ended as one of the largest on record with more than 68,000 fires that burned over 10 million acres across the United States. In the Northwest, more than 77,000 acres burned in Montana, Idaho and Washington. Locally on the Forest, about 47,500 acres burned on National Forest System lands; over 25,000 of that was in the Grizzly Complex itself; approximately 14,500 of those acres make up the project area. Under the selected alternative, roadside danger tree removal and salvage harvest activities will occur on a total of 3,025 acres (21 percent of the burned area analyzed; 12 percent of the total acres burned in the Grizzly Complex Fire; and 6 percent of the acres burned on the Forest).

Forest-wide, the total acreage proposed for salvage and danger tree treatment activities will be about 6,352 acres, or 13 percent of the entire burned area of National Forest System lands administered by the Idaho Panhandle National Forests.

As discussed in more detail below for the intensity factors of significance, the context of this proposal is largely limited to the locale of the project area. Even in a local context, this proposal will not pose significant short- or long-term effects. The proposal's relatively small scale limits its effects on the natural resource values and uses. The analysis of potential environmental impacts related to project activities demonstrates that no aspect of the proposal will result in any significant impacts. The proposal is a site-specific action that does not have international, national, regional, or statewide importance. The physical and biological effects of the selected actions were analyzed at appropriate scales, such as within the project area, adjacent to the project area, or across a larger landscape. The analysis area differs for each resource and rationale for each analysis area is provided in individual specialist reports. The analysis found within the environmental assessment focuses on relevant aspects of the alternatives that have a potential for adverse effects.

Intensity

Intensity refers to the severity of the expected project impacts. I have thoroughly reviewed the environmental effects disclosed in the environmental assessment and the beneficial effects of the action do not bias my finding of no significant environmental effects. I have also considered any adverse effects to each resource area as per 40 CFR 1508.27, which states that impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes the effect will be beneficial.

The following factors were considered to evaluate intensity. My finding of no significant impact is based on the context of the project and intensity of effects using the 10 following factors identified in 40 CFR 1508.27(b).

1. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.

Adverse and beneficial impacts have been assessed and were not found to be significant. The analysis considered not only the direct and indirect effects of the projects, but also their contribution to cumulative effects. Past, present, and foreseeable actions have been included in the analysis. Adverse effects from the selected alternative have been minimized or eliminated through project design features (Appendix A). For this project, there are no known long-term adverse effects or cumulative effects to resources such as soils, wildlife, water quality, fisheries, recreation, or heritage resources (see EA, Environmental Effects).

These impacts are within the range of effects identified in the Forest Plan. I conclude that the specific direct, indirect, and cumulative effects of the selected alternative, Alternative 2, are not significant and this action does not rely on beneficial effects to override any adverse environmental effects. As such, I find that the selected alternative is not a significant federal action.

2. The degree to which the proposed action affects public health or safety.

I find that this project will provide a long-term beneficial effect to public health and safety by improving public, administrative and operational safety along National Forest System roads. Removal of danger trees along roads and trails is essential for providing safe access to the area for the visiting public as well as Forest Service employees and contractors (EA, pages 24, 35-36). The ESD will allow for removal of many of these hazards in the upcoming 2016 field season, before major tree deterioration takes place with its accompanying increase in safety risks to those felling the trees and to the public if they are not removed.

Also, salvage harvesting will mitigate the safety hazards posed by the large numbers of standing dead trees (snags). Snags can fall at any time, posing a continued threat to people working or recreating in the forest. Of particular concern are hazards to crews working to reforest burned areas. While not all dead trees will be salvaged within the proposed units, safety hazards to work crews conducting site preparation and tree planting will be substantially reduced by salvage tree removal (EA, page 36). The project also contains project design features (Appendix A) to protect public health and safety during project implementation, including the removal of danger trees in the reforestation areas.

Burning of forest fuels affects air quality through the production of smoke, which contains particulate matter that can be a human health hazard. Under the selected alternative, there is the possibility of a minor amount of prescribed burning following salvage activities and roadside danger tree removal (burning landings and possibly some small hand or excavator piles).

The District will conduct any pile or landing burning in accordance with the recommendations of the Montana Idaho Airshed Group. The District strictly complies with the procedures and recommendations of the Airshed Group and the proven protocols assure compliance with all legal and regulatory requirements regarding air quality. All Forest Plan standards will be met (EA, page 104-105).

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

No direct, indirect or cumulative effects to cultural resources are expected with implementation of the selected alternative. As required by Section 106 of the NHPA, a Section 106 survey was completed and consultation has been completed with the Idaho State Historic Preservation Office. Implementation of the design features will result in no effect to historic properties within the Grizzly Fire Salvage and Restoration Project (PF Doc. PD-005 and PD-006).

No unique parklands, prime farmlands, wild and scenic rivers, wilderness, potential wilderness, inventoried roadless areas, or unroaded areas are located in the project area. No long-term measurable negative effects to riparian areas or wetlands are expected with this

project because we will be using best management practices and riparian habitat conservation area standards as described in Appendix A.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The topic of post-disturbance logging is generally surrounded by public concern and controversy. During the public involvement process associated with the Grizzly Fire Salvage and Restoration Project, 79 letters were received. Of these 69 (90 percent) support the project; six did not indicate support or opposition (they had questions or recommendations). Of the remaining four letters opposing the project, two raised the issue of scientific controversy (EA, pages 13-14).

The controversy focuses mainly on the ecological consequences. The premise of the arguments is that there are few if any ecological benefits to salvage logging (Hutto 2006, Noss et al. 2006). Regardless of the controversy, the importance of the loss of biological legacies, in particular large snags and large live trees; effects to wildlife species specifically associated with recently burned forests; effects to burned and exposed soils; and effects to riparian areas are important to all of us and precisely why the interdisciplinary team reviewed the pre- and post-fire ecosystem in and around this project area. This is also why the team reviewed reconnaissance field data and the latest science recommendations and findings to develop a comprehensive site-specific proposed action. It is important to understand that the selected alternative incorporates design features to avoid, minimize, or mitigate the potential for undesirable ecological effects associated with post-disturbance logging activities. The design features are included in Appendix A.

The Grizzly Fire Salvage and Restoration project considers the latest and best science available; the environmental assessment cites dozens of peer-reviewed scientific documents used in the analysis, and addresses opposing science. The “Scientific Controversy for Salvage Logging” section of the environmental assessment provides an overview of the science considered and how it was used. A review was conducted of all opposing science presented during the comment period (see EA, pages 13-14, and 124-125). A full list of the references used in the environmental analysis is listed in the “References” section of the environmental assessment.

Of critical importance is the overall scale of the proposed activities within the burned area. As discussed in the preceding context discussion, this project is proposing to harvest a total of approximately 3,025 acres or 12 percent of the area burned in the Grizzly Complex Fire. This represents approximately 6 percent of the entire burned area on National Forest System lands administered by the Idaho Panhandle National Forests.

I believe that the activities proposed for the Grizzly Fire Salvage and Restoration Project analyzed in the accompanying environmental assessment were designed to balance both the ecological and economic concerns presented by the post-fire conditions in the planning area. Information gained from post-salvage research monitoring to provide baseline data which will be useful for validating criteria for assessing mortality/survival by conifer species. The data collected will also be useful for refining assessment of and prediction of long-term effects of mixed severity fires, with and without post-fire management activities, on regeneration given the contemporary forest conditions, which are significantly different than historic conditions. This research has the potential to contribute to future proposals for and decisions about post-disturbance management in similar areas guided by multiple-use

land management objectives. I have also taken into account that opposition to salvage logging has been fully considered through documentation of the no-action alternative.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The selected actions are similar to post-fire actions implemented in other areas on National Forest System, State, county and private lands. It is my conclusion that the possible effects of the roadside danger tree removal, salvage harvest, and associated activities on the human environment are not uncertain and do not involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The selected management actions are similar to actions implemented without significant impacts in the project area, in other areas on the Coeur d'Alene River Ranger District, and on other ranger districts of the Idaho Panhandle National Forests. The selected alternative is not setting a precedent for future actions of significant effects because this action is not unusual in and of itself, nor does it lead to any further actions that are unique. Management practices are consistent with the Forest Plan as described below and in the EA (Appendix D), and within the capabilities of the local ecosystem (Idaho Panhandle National Forests Monitoring Reports, <http://www.fs.usda.gov/main/ipnf/landmanagement/planning>). Similar projects have been conducted across the Northern Region in similar ecosystems, without significant impacts.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The combined effects of past, present, and reasonably foreseeable future actions were considered and are summarized in each resources cumulative effects analysis. Past actions considered in the cumulative effects analysis include those that contributed to establishing the baseline conditions of the project area today as described in the cumulative effects section of the resource reports. Projects that may overlap in time and space with the effects associated with the implementation of the selected action are listed in the environmental assessment (Appendix B). There are no indications of significant cumulative effects to the environment (EA, Environmental Effects).

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

No direct, indirect or cumulative effects to cultural resources are expected with implementation of the selected alternative. As required by Section 106 of the NHPA, a Section 106 survey was completed and consultation has been completed with the Idaho State Historic Preservation Office. Implementation of the design features will result in no effect to historic properties within the Grizzly Fire Salvage and Restoration Project (PF Doc. PD-005 and PD-006).

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

The selected alternative will not adversely affect the viability of any threatened, endangered or candidate species that may occur in the area, because no threatened or endangered botanical, wildlife or fish species, or associated critical habitat occur in the project area (EA, Environmental Effects and specialist reports).

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

My decision will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the environmental assessment; the action is consistent with the Forest Plan and all applicable laws and executive orders as described in the EA, Appendix D, and PF Doc. PD-004).

Conclusion

After considering the environmental effects described in the Grizzly Fire Salvage and Restoration Project Environmental Assessment, appendices and resource reports, I have determined that the selected alternative will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

Findings Required by Other Laws and Regulations

National Forest Management Act (NFMA)

This project does not require any Forest Plan amendments. Project activities are consistent with the National Forest Management Act (16 U.S.C. 1604 (i)) and the Forest Plan for the Idaho Panhandle National Forests (2015) and will provide for diversity of plant and animal communities based on the suitability and capability of the specific land area to meet overall multiple-use objectives (16 U.S.C. 1604 (g)(3)(B)).

Consistency with the 2015 Forest Plan

This decision is being signed under the authority and direction provided by the 2015 Record of Decision for the Idaho Panhandle National Forests Land Management Plan and uses the land management guidance provided in the 2015 Forest Plan. A Forest Plan consistency spreadsheet for the Grizzly Fire Salvage and Restoration Project (available in the PF Doc. PD-004) provides specifics on how each resource meets the desired conditions, goals, objectives, standards, and guidelines in the 2015 Forest Plan. Consistency with the Forest Plan is also summarized in the EA (Appendix D) and discussed in each individual specialist report.

Based on a review of these documents and the project record, I find that this project complies with 36 CFR 219.15 of the Planning Rule (“project and activity consistency with the plan”) and Forest Plan direction. Per 36 CFR 219.15(d) (“determining consistency”) and as documented in the environmental analysis, project record and Forest Plan consistency spreadsheet, my selected alternative:

- Contributes to the maintenance or attainment of one or more Forest Plan goals, desired conditions and objectives;
- Will not foreclose the opportunity to maintain or achieve any goals, desired conditions, or objectives over the long term; and,
- Complies with applicable guidelines and standards as set out in the Forest Plan.

Other National Forest Management Act Consistency Requirements

I have determined the selected alternative is consistent with the following provisions of the National Forest Management Act. These are the applicable provisions; those provisions not applicable to this salvage and restoration project are not addressed.

Suitability for Timber Production (16 U.S.C. 1604(k))

The Forest Plan (FW-GDL-TBR-01) states: “Timber harvest on other than suitable lands may occur for such purposes as salvage, fuels management, insect and disease mitigation, protection or enhancement of biodiversity or wildlife habitat, or to perform research or administrative studies, or recreation and scenic-resource management consistent with other management direction.” As such, salvage activities such as those that will occur under the selected alternative are not regulated under 16 USC 1604(k).

Soil, slope or other watershed conditions (16 U.S.C. 1604(g)(3)(E)(i)) and protection for streams and other bodies of water (16 U.S.C. 1604(g)(3)(E)(iii))

Features of the selected alternative described in this decision and the environmental assessment will ensure that soil, water, and watershed resources will be protected (see Appendix A). Soil surveys have been conducted and existing soil conditions have been evaluated (see Soils Specialist Report).

Restocking (16 U.S.C. 1604(g)(3)(E)(ii))

Technology and professional knowledge were applied to assure that adequate stocking will occur within 5 years after final harvest. The selected alternative includes up to 1,837 acres of reforestation. Tree seedlings will be planted in the salvage units and in the roadside danger tree removal areas following the completion of harvest activities. Tree seedlings will also be planted in areas within or adjacent to the units where treatments are not being conducted and where the fire burned with enough severity that adequate openings in the forest canopy were created to allow the successful growth of the planted trees (such as in riparian habitat conservation areas). See the environmental assessment and Forest Vegetation Specialist Report for more details on the tree species to be planted.

Economic factors (16 U.S.C. 1604[g][3][E][iv])

Management practices were governed by health, safety and reforestation objectives, not strictly economics. Two alternatives were studied in detail that will produce different outcomes in terms of economic efficiency (see Economic Specialist Report). The selected alternative is projected to be an economically viable project and implementing the reforestation treatments will meet the elements of the purpose and need for this project. An estimated 30 million board feet will be sold and the resulting jobs are expected to bolster the local economy.

Clearcutting and Even-aged Management (16 U.S.C. 1604[g][3][F])

The National Forest Management Act and Forest Service policy (36 CFR 219.11(d)(4)) directs land managers to normally limit the size of areas treated by even-aged silvicultural methods to 40 acres or less unless otherwise approved by the Regional Forester. In regard to the Grizzly Fire Salvage and Restoration Project, openings are not limited to 40 acres because all of the salvage harvesting is proposed in response to a large wildfire event. Northern Region (Region 1) Supplement of Forest Service Manual 2400-Timber Management, Chapter 2470 – Silvicultural Practices states: “Where natural catastrophic events such as fire, windstorms, or insect and disease attacks have occurred, 40 acres may be exceeded without 60-day public review and

Regional Forester approval, provided the public is notified and the environmental analysis supports the decision.”

The public was notified that the proposed salvage activities could result in the creation of openings larger than 40 acres in a January 28, 2016 letter to the public: “The proposed salvage activities may result in the creation of 14 openings that exceed 40 acres. In all but three of these, the openings that exceed 40 acres would involve two or more proposed salvage units that share common boundaries. These fourteen openings would range in size from 41 to 223 acres, with a median size of approximately 99 acres.” (PF Doc. PI-001).

The proposed salvage units would occur in a landscape already opened up by the wildfires, and analysis indicates the change in crown cover caused by the proposed salvage would not be discernable over the background (current) condition (EA, page 126).

The planned silvicultural treatments meet the appropriate timber management standards and vegetation management objectives outlined in the Forest Plan. Design of treatments includes features to protect water, soils, and fisheries (see Appendix A).

Temporary roadways (16 U.S.C. 1608(b)) and standards of roadway construction (16 U.S.C. 1608(c))

The National Forest Management Act requires that the necessity of roads be documented and that road construction be designed to standards appropriate for the intended uses, considering safety, cost of transportation, and impacts on land and resources (16 U.S.C. 1608). A travel analysis process was used to identify the condition of and provided management recommendations for each road system in the project area (project record).

Five miles of temporary road construction will occur under the selected alternative; this road construction will be completed using best management practices to protect soil and aquatic resources (Appendix C, Design Features). At the completion of their intended use, temporary roads will be decompacted, recontoured to the approximately shape of the surrounding terrain, and seeded or covered with debris to prevent erosion and accelerate hydrologic and vegetative recovery (EA, Alternative Descriptions, page 27).

Federal Water Pollution Control Act (Clean Water Act) and Idaho State Water Quality Standards

The Clean Water Act (CWA) directs Federal agencies (e.g. the Forest Service) to meet federal, state, interstate and local substantive as well as procedural requirements respecting control and abatement of pollution in the same manner and to the same extent as any nongovernmental entity. The Idaho Department of Environmental Quality (IDEQ) is delegated authority for control of water pollution under the CWA and administers that authority through the Idaho Environmental Protection and Health Act (Title 39, Ch. 1, Idaho Code), the Idaho Water Quality Act (Title 39, Ch. 36, Idaho Code), and water quality standards under the authority of the Idaho Administrative Procedures Act (Hydro-R018, IDAPA 58.01.02).

Sections 208 and 319 of the CWA recognized the need for control strategies for nonpoint source pollution. DEQ is the lead agency for implementation of its Idaho Nonpoint Source Management Plan, under the authority of Section 319 of the CWA and Idaho Department of Lands has the authority to administer the Idaho Forest Practices Act (Title 38, Chapter 13, Idaho Code) and the responsibility to ensure compliance with best management practices (BMPs) to control nonpoint sources of pollutants. Rules pertaining to the Idaho Forest Practices Act and application of BMPs

are found at IDAPA 20.02.01. BMPs are practices, techniques, or measures that are determined to be a cost effective and practicable means of preventing or reducing pollutants generated from nonpoint sources to a level compatible with water quality goals (Idaho Code 39-3602.(3)).

The Grizzly Fire Salvage and Restoration Project is meeting the Clean Water Act and Idaho State water quality standards by utilizing applicable best management practices and adhering to the relevant total maximum daily loads (TMDLs) by maintaining or reducing sediment delivery to project area streams and by maintaining or increasing riparian shading. Best management practices and specific design features designed to protect soil and water will be applied under the selected alternative (see Appendix A).

Executive Orders 11988 and 11990 – Floodplains and Wetlands

The selected alternative is consistent with these executive orders regarding floodplains and wetlands. No actions would occupy or adversely modify wetlands or floodplains. Further, Inland Native Fish Strategy criteria incorporates specific protections for these areas, and these are included in this project (EA, Appendix D).

Clean Air Act

This project is consistent with the Clean Air Act. Burning of forest fuels affects air quality through the production of smoke, which contains particulate matter that can be a human health hazard. Under the selected alternative, there is the possibility of a minor amount of prescribed burning following salvage activities and roadside danger tree removal (burning landings and possibly some small hand or excavator piles).

The District will conduct any pile or landing burning in accordance with the recommendations of the Montana Idaho Airshed Group. The District strictly complies with the procedures and recommendations of the Airshed Group and the proven protocols assure compliance with all legal and regulatory requirements regarding air quality. All Forest Plan standards will be met (EA, page 104-105).

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires Federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat.

This project meets the ESA because no listed plant, fish or wildlife species or their habitat is present within the project area. Biological Assessments have been conducted and concluded there would be “No Effect” to ESA species and their habitat due to the larger effects of the wildfires, the location and design of activities, and the application of best management practices (PF Doc. W-18).

The proposed activities are covered by the Programmatic BA, and have been found to not be a threat to the wolverine distinct population segment (PF Doc. W-21). Given the recent findings from the USFWS along with the above information describing the remote likelihood of effects to wolverines; the Grizzly Complex Salvage project in conjunction with past, present and reasonably foreseeable actions *is not likely to jeopardize the continued existence of the North American wolverine.*

A list of threatened and endangered species and designated critical habitat that may be present in the Grizzly Fire Salvage and Restoration Project area was obtained from Fish and Wildlife Service on May 31, 2016 (PF Doc W-2). Terrestrial wildlife species on the list include the threatened Canada lynx (*Lynx canadensis*). On September 12, 2014 the FWS issued a final rule to revise designation of critical habitat for Canada lynx (USDI 2014a). Per the June 15, 2016 letter from the Fish and Wildlife Service (PF Doc. W-19), the status of the wolverine is proposed; and their concurrence with the programmatic biological assessment is still applicable.

Migratory Bird Act

The Migratory Bird Treaty Act, as amended, made the taking, killing or possessing of migratory birds unlawful. Executive Order 13186 of 2001 clarified the responsibilities of Federal agencies regarding migratory bird conservation and directed Federal agencies to evaluate the effects of Federal actions on migratory birds with an emphasis on species of concern. The Executive Order also directed Federal agencies to develop a memorandum of understanding (MOU) with the Fish and Wildlife Service regarding their role with respect to the Migratory Bird Treaty Act.

In December 2008, the Forest Service entered into a MOU with the Fish and Wildlife Service that further clarified the responsibility of the Forest Service to protect migratory birds (USDA and USDI 2008). In the MOU, the Forest Service agreed to consider the most up-to-date Fish and Wildlife Service list of Birds of Conservation Concern (USDI 2008) when developing or amending land management plans, and to evaluate the effects of agency actions on migratory birds within the NEPA analysis process, focusing first on species of management concern along with their priority habitat and key risk factors. Priority habitats identified in Idaho for migratory birds are riparian habitat, non-riverine wetlands, sagebrush shrub, and dry ponderosa pine/Douglas-fir/grand fir forests.

For the Idaho Panhandle National Forests, the bird species of management concern include those species designated as sensitive. The Idaho Panhandle National Forests is in compliance with the MOU by analyzing the potential effects to these bird species and their habitat at the project level, such as in this document. All treatment areas are post-fire habitat and will only treat dead and dying trees. As such, the treatment areas do not contain shrubs and any trees expected to live will remain.

For species dependent on snags, the selected alternative will retain in salvage units any live trees expected to survive, as well as enough snags within salvage units to meet or exceed Forest Plan guidelines. Although the quality and quantity of habitat will be reduced, approximately 9,858 acres (78% of the existing level) of high quality habitat will still be available to support snag-dependent species, including black-backed woodpeckers. For other species, the priority habitats will not be impacted.

National Historic Preservation Act

Cultural resource surveys have been completed in areas potentially affected by the selected actions of this decision prior to implementation. No direct, indirect or cumulative effects to cultural resources are expected with implementation of the selected alternative. No potentially significant effects were identified. By applying the design features to buffer or avoid cultural resources, negative effects will be adequately avoided. If cultural resources are identified, they will be treated and protected according to provisions of State and Federal law.

Executive Order 12898 – Environmental Justice

The selected alternative was assessed to determine whether it will disproportionately impact minority or low-income populations, in accordance with Executive Order 12898. There were no public comments raised regarding environmental justice considerations, and no disproportional impacts to minority or low-income populations were identified through public involvement efforts. Based on this, the selected alternative is not likely to disproportionately impact minority or low-income populations and therefore complies with Executive Order 12898.

Executive Order 13112 – Invasive Species

Executive Order 13112 of February 3, 1999 was enacted to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause.

The selected alternative aligns with this executive order both by identifying the existing condition of invasive species in the project area and assessing the risks and effects of invasive plant introduction (PF Doc. PD-007). Design features have been incorporated into my decision to help prevent invasive species introduction and control species where feasible (see Appendix A).

Administrative Review and Implementation

An Emergency Situation Determination (ESD) expedites the time period in which this salvage sale could be offered to the public by allowing implementation of the project immediately after a decision on the project has been signed and published. An ESD pursuant to 36 CFR 218.21 was granted by the Chief of the Forest Service for this project on May 13, 2016. When it is determined that an emergency situation exists with respects to all or part of the proposed project or activity, the proposed action shall not be subject to the predecisional objection process and implementation may processed immediately after notification that a decision has been made and documented in a decision notice (36 CFR 218.21(d)(1)). The ESD documentation is posted on the project website.

Contact Information and Responsible Official

I am the responsible official for this decision. For further information concerning the Grizzly Fire Salvage and Restoration Project, please contact Dan Scaife, District Ranger at (208) 664-2318 or dscaife@fs.fed.us, or Ryan Foote, Deputy District Ranger at (208) 783-3101 or rfoote@fs.fed.us during normal business hours at the Coeur d'Alene River Ranger District.

Approved by:



MACARIO J. HERRERA
Deputy Forest Supervisor
Idaho Panhandle National Forests



Date

Appendix A: Project Design Features

The Project interdisciplinary team developed design features to minimize or avoid adverse effects which could occur as a result of implementing proposed activities. The design features are based on Forest Plan direction and policy, best available science, site-specific evaluations, and public concerns; and are applied to the selected alternative (except where specifically stated) during project implementation.

Project implementation includes the physical on-the-ground design of the project completed by layout crews; timber sale contract administration; and reforestation activities such as site preparation and planting. Design features are applied on the ground through physical design as instructed in silvicultural prescriptions, marking guides, and cruise plans. Some features address conditions found on-the-ground during project activities, and are applied through the timber sale contract, which includes both standard and site-specific provisions.

Section 208 of the Clean Water Act authorizes and encourages state and local management of nonpoint pollution sources, which include forest practices. This project incorporates best management practices (BMPs) as laid out in the R1/R4 Soil and Watershed Conservation Practices Handbook to help meet the requirements of the Clean Water Act. Site specific BMPs will be developed based on the proposed activities, water quality objectives, and site specific characteristics in order to avoid or minimize potential adverse impacts to water quality and watershed function from project activities. State monitoring results and professional judgment are used to develop site-specific BMP prescriptions.

All applicable BMPs would be applied to activities proposed in the Grizzly project area. Contract provisions that are requirements in timber sales are the mechanism by which BMPs are implemented during activities. Additionally, monitoring of BMPs occurs during and after harvest in order to ensure correct implementation and effectiveness.

The following table identifies each design feature and whether it will be implemented through contract provision, by the Forest Service, and/or other means. For example, there may be KV funding (through the Knutson-Vandenberg Act) that would cover costs of specific activities related to design features. Some design features will be implemented through specific unit prescriptions and/or marking guidelines.

Table A-1. Design features description and implementation information applicable to the selected alternative.

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
Fuels	
A post-harvest assessment of fuel conditions within harvest units would be made by a fuels specialist and/or silviculturist to determine if any additional fuel treatment is necessary to meet the objectives in the silvicultural prescription. Additional fuel treatments could include slashing of small trees and shrubs, piling, jackpot burning, leave tree protection, etc.	FS (Fire/Fuels)
Woody material yarded to landings would be evaluated for potential biomass use for fuels for schools programs and other similar efforts. Landing piles would be burned if no other feasible use is found.	FS (Fire/Fuels)
Vegetation	
Woody debris retention guidelines would be followed (FW-GDL-VEG-03; FW-GDL-VEG-06; USDA, 1994; PF Doc. VEG-R61, PF Doc. VEG-21).	Contract (C6.406# and/or C6.7)
White pine retention guidelines would be followed (USDA, 1994; PF Doc. VEG-R58).	FS (unit prescriptions) and Contract (C2.38# Species Designation)
All regeneration areas would be planted with site-adapted species/seed source.	KV Plan (KV Other)
Harvest unit layout would consider suitability limitations on a site-by-site basis on the ground. Harvest and site preparation treatments will consider the short and long-term potential negative effects (including blow down, fire mortality, etc.) of proposed activities on adjacent trees and stands with site-by-site prescription modifications, such as change in unit boundary, modification of prescribed burning prescriptions, etc.	FS (marking and prescriptions)
All vegetation management activities would have silvicultural prescriptions approved by a Certified Silviculturist prior to treatment.	FS (standard practice)
Where feasible, no slash pile would be created within 20 feet of any overstory leave trees, with an emphasis on keeping slash piles far away from white pine leave trees.	Contract (C6.7 Hazard Reduction and Site Preparation)
Gopher abatement may be required to ensure successful regeneration establishment in some portions of the proposed regeneration harvest units. Treatments are anticipated to be through use of poison grain; however, other treatments such as trapping may be used. Gopher abatement treatments would consist of an initial treatment and up to two follow up treatments. Pocket gopher control would only be utilized if pre-planting inspection or first, third- or fifth- year regeneration surveys indicate that gopher related herbivory has caused a need. It is anticipated that pocket gopher control would be needed on less than 10% of the acreage proposed for regeneration harvest.	KV Plan (KV Other)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
<p>Low application rates of pesticide would be applied. Under current application methods, pesticide is delivered in a highly targeted fashion by probing for gopher tunnels and delivering measured amounts of bait underground directly into pocket gopher tunnels in order to reduce and/or eliminate effects to non-target species. Application of pesticides would be completed after snowmelt and runoff are completed between mid-spring and early summer. There would be no above ground, broadcast applications of pesticide for the purpose of gopher abatement. White pine and western larch appear to be the species most affected by pocket gopher activity and controlling gopher activity when and where necessary would mitigate the potential that seedlings would need to be replanted and would facilitate successful restoration of these species.</p>	KV Plan (KV Other)
<p>TES Plants</p>	
<p>Botanical field surveys would be completed in all planned activity areas within suitable TES plant habitat.</p>	FS (surveys have been completed)
<p>TES plant occurrences in activity areas would have protection measures designed and implemented by the project Botanist to ensure that activities do not contribute to the decline of the species or the need for federal listing. One or more of the following protective measures would be implemented: 1) drop the proposed unit from activity; 2) modify the proposed unit or activity, 3) implement appropriately designed buffers, and/or 4) implement Timber Sale Contract provisions for Protection of Threatened and Endangered Species, and Settlement for Environmental Cancellation.</p>	Contract (B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources)
<p>Invasive Species (Noxious Weeds)</p>	
<p>To help reduce the spread of noxious weeds and prevent the introduction of new invader species, a contract provision for equipment washing would be used in all construction and timber sale contracts.</p>	Contract (C6.351# Washing Equipment)
<p>A contract provision for herbicide spraying of existing weeds on roads used during the timber sale prior to log hauling would be used in the timber sale contract. Post haul spraying on roads used during the timber sale will be completed by the USFS as necessary.</p>	Contract (C6.27# Noxious Weed Treatment) and FS (post-haul road spraying)
<p>Measures to protect TES plant population viability and habitat capability during noxious weed treatment would be implemented following guidelines provided in the Noxious Weeds Final Environmental Impact Statement and Record of Decision (USDA Forest Service, 2000; PF Doc. CR-028 and CR-029).</p>	Contract (C6.24# Site Specific Special Protection Measures)
<p>Provisions in the contract would require soil disturbance to be mulched or seeded where deemed appropriate by the timber sale administrator and district botanist.</p>	Contract (C6.601# Erosion Control Seeding)
<p>All plant materials used in the project, including grass seed and mulch, would be certified noxious-weed free. Grass seed would be certified, blue-tagged seed.</p>	Contract (C6.601# Erosion Control Seeding)
<p>Native plant materials are required to be used in restoration projects (FSM 2070.3, Amendment 2008). Locally-obtained materials are preferred, but if unavailable or economically unfeasible, appropriate materials may be substituted that meet Region 1 guidelines (Northern Region Native Plant Handbook, 1995; PF Doc. TES-62).</p>	FS (if needed)
<p>Soils</p>	
<p>Coarse woody debris would be retained in accordance with Forest Plan Guideline FW-GDL-VEG-03 (FW-GDL-SOIL-02). Where soil burn severity is moderate to high, leave coarse woody debris at high end of recommended range for the site where possible. (7-17 tons/acre for dry sites and 17-33 tons/acre for moist sites)</p>	Contract (C6.406# Site Condition)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
Fines (material less than three inches in diameter) would be left on site (FW-GDL-SOIL-03). When combined with required coarse woody debris retention, the units should have a minimum of 60 to 70 percent ground cover where feasible. Amounts of coarse woody debris and fines on trails and landings should be higher. Exceptions to this would be places that do not currently contain enough material to attain 60 to 70 percent ground cover.	Contract (C6.4# Conduct of Logging); all units would be whole-tree yarded
All units would be evaluated prior to implementation to determine detrimental soil disturbance levels. Appropriate design features would be implemented in order to ensure units are at or below 15% detrimental soil disturbance per Forest Plan and Regional Standards. Such actions could include scarifying/decompacting soils and placement of slash, woody material and/or duff over exposed soil. Equipment would remain on designated skid trails; if the equipment leaves the skid trail, the additional soil disturbance would be rehabilitated if 15% detrimental soil disturbance standard has been exceeded.	Contract (C6.4# Conduct of Logging) and FS (monitor soil disturbance)
Soil disturbance monitoring would occur in up to ten percent of the salvage units in order to assure Forest Plan and Regional Standards are met. Units would be identified after analysis and field verification is completed.	FS (monitor soil disturbance)
Ground-based equipment would only operate on slopes less than 40 percent (FW-GDL-SOIL-01). Where slopes within an activity area contain short pitches greater than 40 percent, but less than 150 feet in length, ground-based equipment may be allowed, as designated by the timber sale administrator.	FS (unit layout, timber sale administrator notes)
All ground based operation activities in harvest units would occur when the soil profile is dry (top 2 to 4 inches) to reduce the effects from compaction. In general, these conditions occur during summer and into fall prior to fire season ending rains. The exception to this is winter harvest operations which are covered below.	Contract (B6.6 Erosion Prevention and Control)
Pivoting of machinery should be avoided in order to prevent soil displacement.	FS (timber sale administrator notes)
No yarding across designated riparian habitat conservation areas would occur with this project, unless full suspension of logging can be achieved.	FS (achieved through layout; RHCA's were avoided/buffered)
The leading end of logs would be suspended during cable yarding.	Contract (C6.4# Conduct of Logging)
All skid trails would be designated and laid out to take advantage of topography and minimize disruption of natural drainage patterns. Where terrain is conducive, trails would be spaced at least 100 feet or more apart. Mechanized felling and skidding would allow skid patterns to be closer, provided slash mats are used. Reuse existing skid trails where possible.	Contract (C6.4# Conduct of Logging)
Post-harvest, ground disturbance associated with skid trails would be covered with randomly placed logs (on the contour) where possible and may be seeded with the latest seed mix recommended at time of implementation to help increase the micro topography needed to reduce runoff.	Contract (B6.6 Erosion Prevention and Control, C6.601# Erosion Control Seeding and C6.632# Temporary Road and Tractor Road Obliteration)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
If skid trails are to be decompacted or scarified following ground based harvest and fuel reduction activities in order to reduce compaction and potential for erosion. An excavator should be utilized in order to reduce impacts. Decompaction activities should go no deeper than 14 inches and should avoid mixing the soil layers or disrupting their orientation. These activities would be conducted when the soil is dry. In general, operations during the dry period typically occur July 1 to October 15, but may vary by year, depending on local weather conditions. As much slash as possible should be left on the skid trails following decompaction. The timber sale administrator, in conjunction with a Forest Service soil scientist would determine those areas that need to be decompacted.	Contract (C6.633# Temporary Road Skid Trail/Skid Road and Landing Scarification)
Placement of landings and skid trails should avoid, where possible, high severity burn areas within units.	FS (timber sale administrator notes)
All landings other than skyline landings adjacent to existing system roads utilized would be decompacted preferably with an excavator and covered with some residual slash (within guidelines provided by FW-GDL-VEG-03), and seeded upon completion of the sale.	Contract (C6.633# Temporary Road Skid Trail/Skid Road and Landing Scarification and Control, C6.601# Erosion Control Seeding)
All temporary roads would be rehabilitated (all new construction would be recontoured; existing prisms would be placed in a stable condition through recontouring and/or decompaction). Cut/fill slopes and crossings would be reshaped to natural contours. Available slash and large wood material (>3 inches) would be applied to the recontour surface (slash is considered "available" where the equipment can reach it from the working area where the rehabilitation is occurring).	Contract (C6.632# Temporary Road and Tractor Road Obliteration)
For any units harvested in the winter, equipment would operate on soil that is frozen to a minimum depth of four inches, or on 12 inches of settled snow and a slash mat. Snow may be removed, prior to operations, from trails to facilitate freezing into the soil profile.	Contract (C6.316# Limited Operating Period)
Cease operations under wet or thawing conditions. Harvesting during winter conditions requires extra vigilance in monitoring ground conditions in order to recognize the appropriate time to cease operations. Conditions can change rapidly throughout the day, especially in early and late winter.	FS (timber sale administrator notes) and Contract (B6.6 Erosion Prevention and Control)
Operations utilizing the winter harvest design features are still bound by contract provision timber sale contract provision, B6.6 Erosion Protection and Control.	Contract (B6.6 is a standard provision in all timber sale contracts)
Aquatics and Fisheries	
Inland Native Fish Strategy (INFS) buffers would be applied as described in the Forest Plan. Within the INFS riparian habitat conservation area (RHCA) buffers, there would be no commercial timber harvest, no new roads or lands, and no side-casting of material.	FS (unit layout) and Contract (B6.5 Streamcourse protection)
Trees felled within buffers would be left on site.	FS (timber sale administrator notes) and Contract (B6.4 Conduct of Logging)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
No fuels or other toxicants would be stored within buffers; refueling of equipment would not occur within buffers.	Contract (B6.34 Sanitation and Servicing; B6.341 Prevention of oil spills)
New stream crossing structures would be designed to meet 100-year flood criteria.	FS (road package)
Where appropriate and feasible, aquatic organism passage concepts would be included in stream crossing designs.	FS (road package)
No in-channel activities are proposed, however; if a need for instream work is identified notify the district fish biologist and utilize the following timing restrictions: In the spring spawning season, there would be no instream activities prior to July 15. In the fall spawning season, there would be no instream activities from September 1 through March 15. Dates can be modified when site-specific information on staging and spawning of native fishes supports the change in dates.	FS (road package and timber sale administrator notes)
Snags	
Vegetation management activities should generally retain snags greater than 20 inches DBH and at least the minimum number of snags and live trees (for future snags) that are displayed in Table 4 of the Forest Plan (FW-GDL-VEG-04; USDA 2015). Where snag numbers do not exist to meet the recommended ranges, the difference would be made up with live replacement trees. Exceptions occur for issues such as human safety and instances where the minimum numbers are not present prior to the management activities.	FS (project design and layout, prescriptions/ marking guides) and Contract (Species Des C2.38#)
Where vegetation management activities occur and snags (or live trees for future snags) are retained, the following direction should be followed (FW-GDL-VEG-05): Group snags where possible; retain snags far enough away from roads or other areas open to public access to reduce the potential for removal (generally more than 150 feet); emphasize retention of the largest snags and live trees as well as those species that tend to be the most persistent, such as ponderosa pine, larch, and cedar; and favor snags or live trees with existing cavities or evidence of use by woodpeckers or other wildlife.	FS (project design and layout, prescriptions/ marking guides) and Contract (Species Des C2.38#)
Wildlife	
Contract provisions for protection of Threatened, Endangered, Proposed, and Sensitive (TEPS) species, and settlement for environmental cancellation would be included under all alternatives. If TEPS species and/or significant habitat are discovered before or during project implementation, the sale administrator and the district wildlife biologist would be notified so that if needed, measures could be taken to avoid impacts and meet Forest Plan Standards. Measures could include altering or dropping proposed units, modifying the proposed activity, or implementing buffers. The estimated effectiveness for this design feature is high. Contract provisions for protection of TES habitats and locations are utilized in all contracts and have been effective in protecting these resources (USDA 2013).	FS (timber sale administrator notes) and Contract (B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources and Cave Resources)
Archaeology	
Avoidance of cultural resources would require the retention of such properties in place and their protection from effects resulting from the proposed activities. Effects would be avoided by implementing the following specific actions: All cultural resource sites will be avoided with a buffer of 30 meters regardless of status of eligibility for listing on the National Register of Historic Places, unless the cultural resource site was previously recorded and determined not eligible with SHPO concurrence; temporary roads would be routed away from archaeological sites; road re-alignments would be routed to avoid archaeological sites; and archaeological sites and sensitive areas would be avoided during road closure and/or decommissioning.	FS (unit layout) and Contract (B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
Where existing system roads are scheduled for maintenance only (not for reconstruction) and pass through archaeological sites, road work would be confined to the existing roadway and ditches.	FS (road package) and Contract (B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources)
Although the cultural resources surveys completed for this project are designed to locate all archaeological sites that might be eligible for the National Register, such sites may go undetected for a variety of reasons. Pursuant to the provisions found in 36 CFR 800.13, should any previously unrecorded cultural resources be discovered during project implementation, activities that may be affecting that resource would be halted immediately; the resource would be evaluated by a professional archaeologist; and consultation would be initiated with the State Historic Preservation Officer (SHPO), as well as with the Advisory Council on Historic Preservation, if required, to determine appropriate actions for protecting the resource and for mitigating any adverse effects on the resource. Project activities would not be resumed until the resource is adequately protected and until agreed-upon mitigation measures are implemented with SHPO approval.	Contract (B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources)
Recreation	
The public would be notified through the media and communication with user groups of any temporary closures of trails or roads resulting from road reconstruction, harvest operations, and other proposed activities. ROW, outfitter/guide permit holder in the salvage area, would be notified in advance of operations affecting use of roads and trails.	FS (press release, timber sale administrator notes)
To protect public safety, the upper trailhead and top 0.3 mile of Trail 32, and Trails 807 and 807A would be temporarily closed during road reconstruction, harvest operations, and log hauling on, across, or alongside the trails.	FS (closure order/press release, timber sale administrator notes)
During project activities alongside or across MVUM roads open to public travel, public safety would be protected by use of signing and traffic control as necessary. The purchaser would be responsible for all signing and flaggers, or other means of traffic control. Signs would be posted on active haul routes to alert travelers to log truck traffic within and outside the project area. During hauling on portions of Roads 260, 400, 513, 959, 6923 and 6924, the purchaser may need to use flaggers to prevent hazards of log trucks meeting recreation vehicles on rough, narrow roads with few turnouts. All traffic control signs would adhere to standards set forth in the current edition of the Manual on Uniform Traffic Control Devices.	Contract (B6.33 Safety Attachment)
Project activities on or alongside open roads and trails would be conducted with minimal disruption to recreation access and all log haul would be prohibited on weekends and holidays. Unrestricted open roads would be kept open during project activities with limited delays. Signs notifying forest visitors of possible delays due to harvest activities along open roads would be placed at junctions providing alternate routes to avoid traffic disruptions.	FS (recreation signing, timber sale administrator notes) and Contract (C5.12# Use of Roads by Purchaser)
Whenever possible, buffers, or retention areas would be created along recreation corridors to provide some shading, screening, and physical distance to lessen the short- to mid-term impacts of proposed activities on recreation use and quality.	FS (project design and layout)
Designated trails within the project area would be identified as protected improvements and be returned to a condition meeting trail management objectives to the extent possible. Once harvest and subsequent activities are completed, Trail 32 would be rebuilt to foot trail specifications and Trails 807 and 807A would be rebuilt to pre-haul conditions. Trail infrastructure such as trail-friendly barriers, signs and markers, and drainage features would be replaced, repaired, or constructed as necessary.	Contract (B6.22 Protection of Improvements and Road Package)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
All danger tree removal activities along designated trail corridors (outside individual harvest units) would follow Region 1 specifications and guidelines for Level 1 maintenance for usability and user safety according to trail management objectives. Trees would be felled away from the trail and selected for harvest according to height and width clearing limits for recreation trail corridors.	FS and/or service contracts (only applies to non-merchantable tree felling)
To reduce long-term adverse effects to non-motorized Trail 32 where it occurs within or adjacent to a harvest unit, trees would be directionally felled away from the trail and whole tree yarded. Stumps would be cut as low to the ground as practicable for a distance of 25 feet from the trail. Non-merchantable trees felled alongside the trail for safety and not removed, would be cut directionally away from the trail and an effort made to arrange them to create an appearance of naturally-occurring downfall. Unless posing a safety hazard, cut only those trees capable of reaching the trail corridor if they fall. Where present, retain pockets of understory vegetation and scattered groups of sound trees alongside the trail to lessen impacts to the semi-primitive trail character. Where possible, leave groups of snags outside the reach of the trail corridor. Chip, burn, or otherwise dispose of landing piles within view of the trail. When project activities are complete, re-establish the trail corridor and return the trail tread to a 24-inch width. Seed the trail shoulders with a certified weed-free native seed mixture including grasses, forbs, and wildflowers.	FS (unit layout)
To reduce long-term adverse effects to motorized Trails 807 and 807A, minimize brush clearing from road shoulders where road maintenance/reconstruction occurs on the trail corridor to open it for proposed activities. Where danger trees are felled and not removed, fall them directionally away from the trail, keeping the trail corridor clear. Where possible, retain pockets of vegetation along the trail (for a distance of 25-50 feet on either side of the trail) to provide visual screening and to buffer dust and noise. Where danger tree removal outside of harvest units occurs alongside the trails, remove only trees capable of reaching the trail corridor if they fall. At the conclusion of activities, motorized Trails 807 and 807A would have rolling dips installed where necessary and ATV-friendly barriers constructed at the trailheads. Seed the trail shoulders with a certified weed-free native seed mixture including grasses, forbs, and wildflowers.	FS (unit layout, road package)
To avoid adverse effects to groomed snowmobile trails, project activities would be prohibited between December 15 and March 31, unless otherwise agreed.	Contract (C6.316# Limited Operating Period)
Danger trees felled and not removed in riparian areas along the lower stretch of Road 400 would be bucked and limbed as necessary so they do not block access to established dispersed sites along Flat Creek.	FS (Fire/Fuels and/or Recreation)
Visuals	
To the extent possible, avoid long, straight edges along unit boundaries. Strive for curvilinear edges and gradual changes in tree heights along the edges of openings. This can be accomplished by leaving irregularly sized and spaced individual or groups of trees scattered along the edge, or by using a variable density cutting technique (feathering) to create a more natural edge that blends into adjacent vegetative cover. Where a unit interfaces with an opening, harvest could be progressively increased toward the outside edge of the unit. Where a unit interfaces with denser forest, harvest could be decreased toward the outside edge. This transition zone should not be uniform in size and should vary in width. Techniques to reduce adverse visual effects are most important in the Grassy Mountain units and Lower Flat units viewed from Road 208, the North Fork Coeur d'Alene River, Trail 81, and Little Guard Lookout. Grassy Mountain and Lower Flat units (except LF unit 23) all occur within sensitive viewsheds and should have some softening of the vertical linear edges where feasible. Most critical are Lower Flat units 6, 7, 22, and 25-28.	FS (project design and layout)
Where possible, soften hard edges of skyline corridors by harvesting edge trees in an irregular pattern that creates variability in both height and spacing of residuals.	FS (project design and layout)

Design Feature Description	Implementation - Contract Provision or Forest Service (FS)
Treatment boundaries should extend up and over ridgelines to avoid a row of remnant trees along ridgelines that draw attention to management activities and are inconsistent with patterns created by fire or other natural disturbances. This is especially important along ridgelines silhouetted against the sky.	FS (project design and layout)
Strive to retain vertical structure and irregularly arranged groups of reserve trees to emulate natural retention patterns, particularly in units viewed as foreground and middle ground, or for an extended viewing period. This design feature is most importantly applied to the Grassy Mountain units and Lower Flat units 6A/B, 7, 22, 25A/B, 26, 27, and 28.	FS (project design and layout)
Where harvest units and danger tree removal areas are adjacent to heavily used motorized recreation corridors, retain vegetation within a 25-50 foot buffer, where feasible, to screen harvest activity from the recreating public. This would apply to portions of the following recreation corridors that occur within the fire perimeter: Roads 208, 260, and 265, and motorized trails 807, and 807A.	FS (project design and layout)
Residual slash concentrations, root wads, and other debris would be kept to a minimum for a distance of 25 feet from roads 208, 260 (within the Grassy Mountain area) and 265, except where the terrain drops off sharply below the road. Within these areas maximum stump height should be 12 inches or less.	Contract (C6.7 Hazard Reduction and Site Preparation; B6.412 Stump Heights)
Where feasible, retain screening trees one tree-height below new temporary roads and landings (including cable landings) when viewed from below. Avoid creating a straight edge of trees by saving clumps of trees and single trees with varied spacing. Screening would reduce visual effects of temporary roads T02, T03, T07, T08, T10, T11, and T16	FS (project design and layout) and Contract (B5.1 Authorization)
Where possible, landings in units alongside roads 260 and 265 should be placed on secondary haul routes rather than next to the primary recreation corridor.	FS (timber sale administrator notes) and Contract (B6.422 Landings and Skid Trails)
Keep landings 50-100 feet away from Trail 32.	FS (timber sale administrator notes) and Contract (B6.422 Landings and Skid Trails)
Where new access roads and skid trails meet a primary travel route, they should (where feasible) intersect at a right angle and curve after the junction to minimize the length of route seen from the primary travel route.	FS (timber sale administrator notes) and Contract (B6.422 Landings and Skid Trails)