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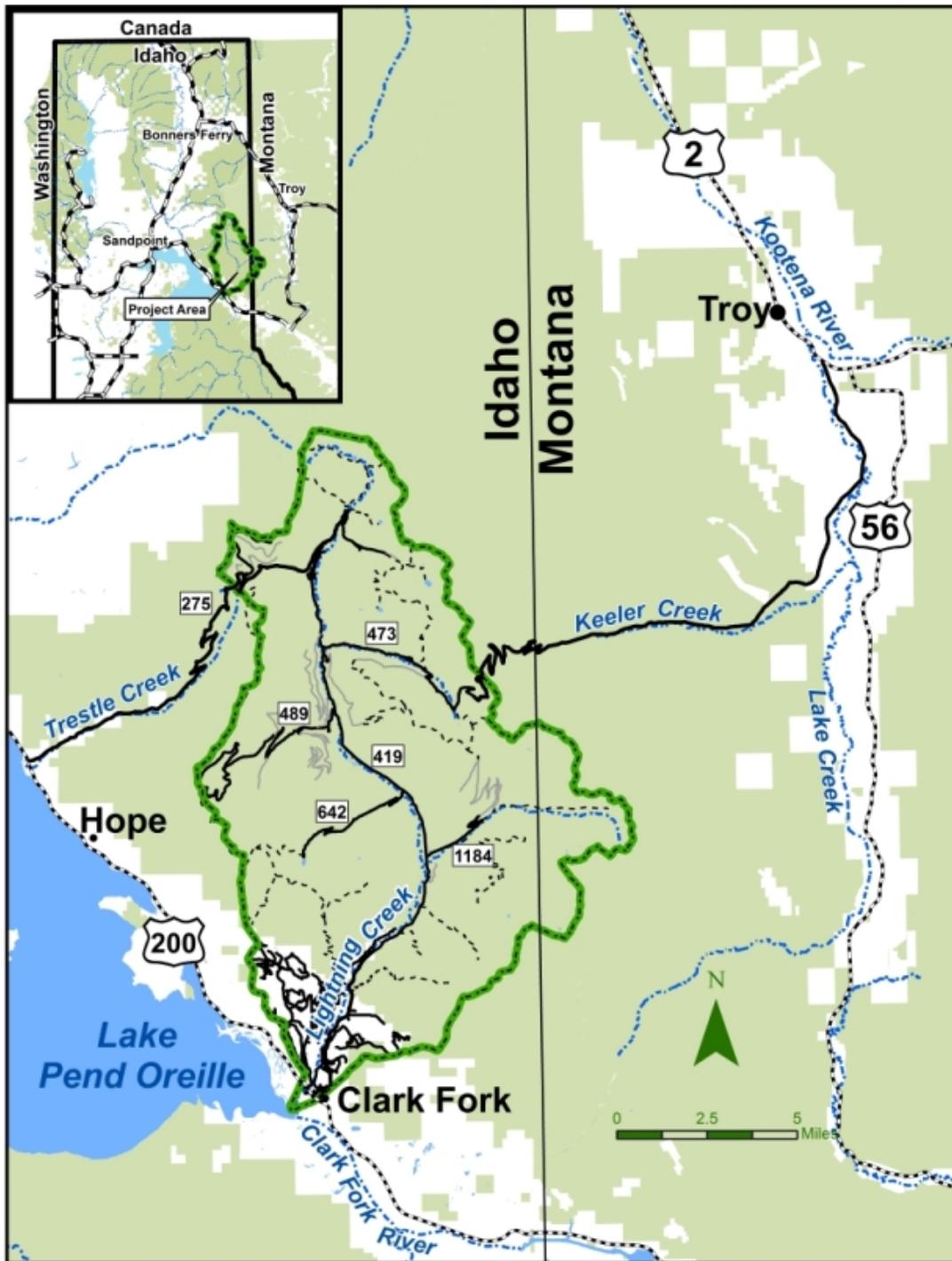
February 2009



Decision Notice and Finding of No Significant Impact

Lightning Creek Restoration Project

Sandpoint Ranger District, Idaho Panhandle National Forest
Bonner County, Idaho



Location of the Lightning Creek Project

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United States Department of Agriculture, Forest Service
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Introduction

In December of 2007, the Lightning Creek Restoration Project was proposed to address flood-damaged roads in the Lightning Creek drainage, as well as needs to reduce road-related risks from future flooding, to protect resources such as fish, wildlife, and water quality, and manage roads within limited budgets. An environmental assessment was completed in November 2008. This decision notice (DN) documents my decision for the Lightning Creek Restoration Project.

The Lightning Creek project area encompasses National Forest System lands in the Lightning Creek watershed, which is located about 20 miles east of Sandpoint, Idaho. The Lightning Creek valley runs in a north-to-south direction along the Idaho/Montana border and drains about 118 square miles. Lightning Creek joins the Clark Fork River west of the town of Clark Fork, Idaho, in Township 55 North, Range 2 East, Section 3 (see vicinity map, previous page).

I. Decision and Rationale

The Selected Alternative

After careful review of the environmental assessment (EA) for the Lightning Creek Restoration Project, the Finding of No Significant Impact (FONSI), comments from the public, resource reports, and the project file, **I have decided to select Alternative 4 (option A).**

Alternative 4 will reconstruct 12.8 miles of flood-damaged road; decommission 3.9 miles of open road, and decommissioning 46 miles of grown-in and closed roads. About 16.3 miles of road will be converted to nonmotorized trail, 7.5 miles of road will be converted to OHV trail, and 2.1 miles of motorized trail will be converted to nonmotorized trail. About 0.1 mile of a new OHV trail will be constructed for administrative access¹ to a snow and climatic monitoring station (see Table 1, next page, definitions on p. 3, and Figure 1). A single span bridge will be constructed on Lightning Creek road 419 over East Fork Creek, and the bridge to Porcupine road 642 that was damaged in the flood will be removed and recreationists will ford Lightning Creek to access Porcupine road.

Riparian and aquatic habitat improvement will take place in lower East Fork Creek, lower Rattle Creek and Lightning Creek to help slow floodwater velocities, and to trap and maintain free-floating woody debris at flood stage in order to promote the formation of debris jams. In combination with planting native riparian species, this activity will help to attain the Forest's riparian management objectives (RMOs) for improving bank stability, riparian and aquatic habitat complexity, and providing shade to the stream channel. This will also contribute to meeting water quality objectives outlined by the IDEQ for reducing sediment and instream temperature. See Appendix A (p. 17) for a detailed description of the selected alternative, Alternative 4 (option A).

¹ For the Natural Resource Conservation Service (NRCS)

Table 1. Road and trail activities for Alternative 4, option A, the selected alternative

Activities	Alternative 4
Road Reconstruction and Maintenance	
Road 419 (Lightning Cr)	12.8
Road 642 (Porcupine)	0
Road 1184 (East Fork)	0
Road 1030	0
Road 473 (East end of Rattle Cr)	0
Total Reconstruction and Maintenance	12.8
Road Decommissioning	
<i>Open Roads*</i>	
473 and 473UA (Rattle)	3.4
419 (Lightning portion rerouted)	0.5
2240 (Auxor Basin)	0
<i>Total Open Roads* Decommissioned</i>	3.9
<i>Restricted Roads</i>	3.3
<i>Impassable and already closed roads</i>	46.0
Total All Decommissioning	53.2
Roads Converted to Nonmotorized Trail	
<i>Open Roads*</i>	
473 (Upper Rattle Creek)	3.7
1184 (East Fork Creek)	1.3
1030	0.9
<i>Total Open Road Converted to Nonmotorized Trail</i>	5.9
<i>Closed Roads</i>	
340 (Mud Creek)	2.8
1184 (East Fork Creek)	0.9
1091A	0.6
<i>Seasonally Restricted Roads (1030)</i>	6.0
Total All Roads Converted to Nonmotorized Trail	16.3
Open Road* Converted to OHV Trail	
Porcupine Road (642)	5.0
Road 2240 (Auxor Basin)	2.5
Total Open Road* Converted to OHV Trail	7.5
Motorized Trail Converted to Nonmotorized Trail (Lake Darling Trail 52)	2.1
New Motorized Trail Construction (NRCS Permit Access)	0.1

* Open road refers to open before the 2006 flood

Definitions for Activities

The following provides detailed descriptions for the actions in Alternative 4. Management and maintenance levels of roads in the watershed that do not fall into one of the first five categories will not change. Snowmobile restrictions will also not change.

Road Reconstruction – Road reconstruction will be focused on repairing specific sections of road that were affected by the flood to return them to their pre-flood maintenance levels and condition. This will consist of measures to decrease risk of future road damage, and may include repairing drainage structures, reinforcement, and relocating specific segments to more stable locations.

Road Decommissioning – Decommissioning a road means physically deconstructing it and/or administratively removing it from the Forest transportation system. It can be accomplished with actual on-the-ground road work, or it can be accomplished with just an administrative change to the road's status on the transportation system. On-the-ground road work may entail one or more of the following to prevent future failures and erosion hazards: full or partial recontouring of the road prism, ripping or subsoiling the road surface, removing culverts and recontouring stream crossings, and planting and seeding, mulching, or slashing disturbed areas. If no hydrologic problems or risks of mass failure are present, and/or the road is grown in to the point that use is not possible, decommissioning may entail barricading the road to restrict motorized access and removing its status as a classified road from the transportation system. In some cases, a barrier may not even be necessary.

Convert Road to Motorized Trail – This will entail changing the designated vehicle access on a road from passenger or high-clearance four-wheeled vehicles to off-highway vehicles (OHVs) 50 inches wide or less. Where roads cross streams, drainage features will be removed, the crossings will be made hydrologically stable, and will be designed to accommodate OHV passage in an environmentally sound manner.

Convert Road to Nonmotorized Trail – This means converting an old road prism to a designated nonmotorized system trail. This activity will entail fully or partially obliterating the road prism, installing waterbars, removing culverts, and recontouring stream crossings. During this process, a 30-inch-wide trail tread will be installed to accommodate foot, bicycle, and equestrian traffic. Clearing limits will be 8 feet wide and 10 feet high. Trails will be maintained as nonmotorized when there is no snow. There will be no restrictions to snowmobile traffic during winter months.

Converting Motorized Trail to Nonmotorized – This means eliminating motorized use on trails formerly designated for this type of use, while maintaining access for nonmotorized users. A Forest order will change the use designation, information signs will be posted, and barriers such as boulders will be placed and arranged to prevent motorized vehicles of all sizes from entering the trail.

Riparian and Aquatic Habitat Improvement - Riparian and aquatic habitat improvement measures will include installing point-bar structures and native riparian planting to promote the formation and maintenance of an effective floodplain, providing habitat complexity for aquatic species, and enhancing stream stability.

Rationale

My decision to select Alternative 4, option A took into consideration many factors that align with meeting our purpose and need for the project. These included protection of natural resources in the watershed such as water, fish, wildlife, and rare plants; historic recreational use of the watershed; the costs of past, current and future road work in the drainage; effects of alternatives on other resources, and our ability to comply with Forest Plan standards and guidance for the project as well as Federal and State laws, policies, and regulations. Within the context of all these things, I reviewed the environmental analysis of the specialist reports, the environmental assessment, and all the public comments we have received to date, to arrive at my decision. The following sections contain a summary of the public involvement activities that occurred throughout the planning process, how public comments were taken into consideration, and a discussion of the trade-offs I weighed as I evaluated each comment.

Public Involvement Activities

The Lightning Creek Restoration project file contains the public letters, records of phone calls and visits to the area, mailing lists, news articles, the Quarterly Schedule of Proposed Actions, and other documentation of the outreach and discussions held with members of the public. The following public involvement activities have taken place during the planning process (see the Public Involvement section of the project file):

- Two public meetings were held for this project (April 11, 2007 and September 18, 2007)
- Newspaper articles and news releases have been published in the Bonner County Daily Bee since the 2006 flood informing the public of storm damage, meetings, workshops, the changing condition of Lightning Creek, and access restrictions.
- The Sandpoint Ranger District Staff has made over 38 contacts with individuals and groups to discuss the Lightning Creek Restoration Project. These contacts have included meetings with the Bonner County Commissioners, conservation groups, advisory groups, state government officials, ATV and backcountry horsemen groups, and briefings with the IPNF Forest Supervisor.
- On December 11, 2007, a letter introducing the proposed action was mailed to 214 people, agencies, and organizations. Thirty-eight individuals and organizations responded to our letter with comments, suggestions, and alternatives to consider. Content analysis of these comments generated the issues below; this documentation can be found in the public involvement section of the project file.
- On November 12, 2008, the Lightning Creek Restoration Project EA and draft Finding of No Significant Impact were mailed to interested parties and posted on the Idaho Panhandle National Forests website. A news release was also issued announcing the release of the document. A total of eight comments were received. Content analysis was completed on the comments received and can be found in the project file under public involvement.
- Following the release of the EA and draft FONSI, meetings and phone calls occurred with some of the individuals that submitted comments on the EA.

Consideration of Public Comments and Concerns

We received comments from many individuals and several organizations and agencies on our proposed action and our environmental assessment. As a result of public comment and errors discovered since the release of the EA, we have made some minor changes and clarifications that have been included in an Addendum and Errata (DN, Appendix B).

Throughout the comments received, I could see what a special place the Lightning Creek drainage is to so many people for recreation, both motorized and nonmotorized. Summarized in this section are some of the comments we heard more than once; all comments and our responses to them are located in the project file (Section B – Public Involvement).

Restoring All Roads to Pre-flood Conditions

A reoccurring request throughout the public involvement process was to restore all the flood-damaged roads to pre-flood access conditions. If there was an unlimited maintenance budget, and the geological and climate conditions in the drainage were more stable, I could have considered this request an option. However, as described in the environmental assessment (pp. 1-3), the Lightning Creek drainage is one of the wettest places in Idaho with geology very conducive to large landslides and flooding. Many of the roads built in the watershed were constructed in poor locations without good engineering designs. All these factors have led to an extensive history of road and bridge failures each time the drainage has suffered a large flood event. Repairing this infrastructure has cost taxpayers millions of dollars since the 1970s (see Geology and Engineering Report, pp. 6-10 and 14-15).

These factors, combined with declining Forest Service road maintenance budgets (Road and Recreation Report pp.6-7), prevent me from keeping these roads in good repair. Although the 2006 flood qualified some of the roads in the Lightning Creek drainage for emergency funding from the Federal Highways Administration, the agency specified that it did not want to reinvest in continually failing roads. However, Federal Highways has agreed to fund a new bridge on Lightning Creek road over East Fork Creek (something the public has been asking district rangers to do for over 20 years), given the savings we would incur by not reconstructing the Porcupine Road bridge, East Fork Road (1184) and Rattle Creek road (473) (EA, p.9).

As stated in the analysis of the environmental assessment, decommissioning roads will provide benefits to various resources (FONSI, see beneficial effects). Removing roads provides more secure habitat for wildlife such as grizzly bear, which needs more secure habitat in this watershed (EA, pp. 32-35). Reducing the amount of continually failing roads improves water quality and fish habitat for important species such as bull trout (EA, pp. 19-31).

Therefore, I had to consider all the roads in the drainage that had previously been open to motorized vehicles and weigh the trade-offs between providing safe, well-maintained motorized access, with protecting resources while balancing the demands for recreation access in the Lightning Creek watershed within the context of future financial considerations.

Rattle Creek Road 473

Many people commented about the loss of access from the closure of Rattle Creek road. I recognize that this road, for decades, has provided popular passenger vehicle and snowmobile access to the Cabinet Mountains divide on the Idaho-Montana border, as well as access to a slate rock pit. The environmental assessment on page 76 discusses how my staff looked at a variety of options for reconstructing this road prior to the flood and was unable to find an alternate route that would minimize the risks of the road continually failing. When the flood occurred, the damage to the road was beyond what we imagined. Therefore, due to the hydrology, geology, topography, and precipitation events typical of the Rattle Creek drainage (EA, pp. 19-20) and its inherent high risk of landslides and failures, it is impractical and cost prohibitive to reconstruct or reroute the Rattle Creek Road (see Engineering and Geology Report, Aquatics Report and project files).

Rattle Creek provides important bull trout spawning habitat and is within the North Lightning Bear Unit, which does not currently meet the grizzly bear habitat standards due to the existing amount of motorized roads and trails. The decommissioning of Rattle Creek road 473 and conversion of a portion of the road to a nonmotorized trail will result in a long-term improvement of watershed condition through the reduction of chronic sediment delivery to streams and improvement of core grizzly bear habitat through a decrease in road densities (EA, pp. 21-31, 34-35; Wildlife Report, pp. 17-31; Aquatics Report, pp. 28-40).

Although access to the drainage will no longer be available from Lightning Creek, we have done our best to continue to provide access to the upper section of road that did not experience as much damage. This will continue to allow access to the Rattle Creek slate pit (via Keeler Creek in Montana) as well as recreation use to the nonmotorized trails in the drainage. I recognize this is a large loss of motorized access to the Rattle Creek drainage. However, it would be irresponsible of me to continue to repair a road that will constantly be washed away.

Porcupine Bridge and Road 642

Like the Rattle Creek road, this was also a very difficult decision. As explained in the environmental assessment on page 75, replacing the bridge that previously existed over Lightning Creek to access Porcupine road would not be environmentally sound. In order for the bridge to withstand the flashy conditions of the watershed, it would need to be replaced with a three span bridge. The Federal Highways Administration will neither approve the funding needed to create a bridge of this size, nor fund road repairs of the Porcupine road. These types of funds are not part of our road maintenance budget either. Recognizing motorized access to this lake has been a unique feature to this drainage (Road and Recreation Report pp. 7-9), our only option to continue providing this access is to allow crossing Lightning Creek via a ford. The ford will limit motorized access to OHVs only (vehicles less than 50 inches wide) to prevent environmental damage to Lightning Creek and its banks (EA, p. 26). In my discussions with individuals and groups, I understand the impact this change will have with the loss of access by larger motorized vehicles. This is another decision with a trade-off, because removing the bridge to Porcupine allows us to finally get a bridge over East Fork Creek, which will allow a wider range of seasonal access into the entire Lightning Creek drainage.

East Fork Creek Crossing,

We have received many requests over the years for restoring permanent access across East Fork Creek on the Lightning Creek road. As discussed above, since the Federal Highways Administration is providing funding, I have decided to construct a new bridge over East Fork Creek, which will provide greater seasonal access into the Lightning Creek drainage (EA, p. 48). The EA states on page 9 that we will get funding to build this bridge given the savings we will incur by not reconstructing the Porcupine Road bridge, East Fork road, and Rattle Cree roads. I believe this change in seasonal access, allowing all types of motorized vehicles into the Lightning Creek drainage, will benefit many recreational users.

Roads 1184 and 1030

Many people said they would like to see road 1184 repaired. In deciding what to do on this road, and the 1030 system located off the end of this road, I considered a number of resource issues such as aquatics, wildlife, and recreation. The flood left road 1184 in the floodplain of the creek. Reconstructing this road would be very expensive and would still result in a high risk of failure due to the road's proximity to East Fork Creek and its location on unstable landtypes (EA, p. 24 and Aquatics Report p. 34). In addition, it would cause an increase in disturbance potential to nesting goshawks (EA, p. 44). In some places, road 1184 is immediately adjacent to East Fork

Creek creating concerns related to bull trout and the potential for road-related sediment to impact their habitat (EA, p. 24). East Fork Creek historically has been considered the primary bull trout-spawning tributary to the Lightning Creek watershed (EA, p. 28). Furthermore, roads 1184 and 1030 are within the Scotchman Bear Management Unit (BMU), which currently does not meet secure grizzly bear habitat requirements (Wildlife Report pp. 14-15).

Again, this decision was not made without recognizing the trade-offs. I believe the gain in converting these roads to nonmotorized trails will help provide much needed secure grizzly bear habitat (EA, p. 35), help improve water quality and bull trout habitat (EA, pp. 21-30), and provide an opportunity to connect the eastern side of Lightning Creek drainage with nonmotorized trails from East Fork Creek to Moose Lake (EA, pp. 48-50).

Lake Darling Trail 52

The change of this trail from single-track motorized to nonmotorized was a concern for some motorized trail users. Lake Darling trail is a one-way trail that receives low motorized use compared to nonmotorized uses (hiking and horseback riding). The trail is also surrounded by an area designated as a semiprimitive nonmotorized recreational setting and the motorized use of this trail compromises that designation (Road and Recreation report p. 14).

Removal of all motorized use on this 2.1-mile trail will help enhance the semiprimitive nonmotorized recreational opportunity of the area (which would be compatible with the surrounding areas; EA, p. 48) and help provide more secure habitat in an area that has documented use by threatened, endangered and sensitive wildlife species (EA, pp. 33-34). Based on requirements set forth by the U.S. Fish and Wildlife Service, the Forest Service must reach certain levels of secure grizzly bear habitat within each bear management unit and reduce the amount and density of roads and motorized trails in bear management units that are not meeting the standards.

The Lake Darling Trail is within the North Lightning Bear Management Unit, which does not currently meet the grizzly bear habitat standards due to the existing amount of motorized roads and trails in the unit. Removing motorized use on the Lake Darling Trail will provide for more secure wildlife habitat and bring the North Lightning Bear Management Unit closer to meeting the established standards (EA pp. 34-35). This will also allow us to continue providing motorized access in other areas of the Lightning Creek drainage. I believe that the gains in secure grizzly bear habitat in the Lake Darling area outweigh the loss of motorized access to Lake Darling, given the low motorized use of a relatively short one-way trail.

In addition, it is my hope that providing a much longer OHV trail to Porcupine Lake will help to make up for the loss at Lake Darling. Converting the Porcupine road to a dedicated OHV trail (vehicles 50 inches or less) will provide a family-friendly OHV trail where there are no safety concerns associated with the mixing of OHVs with full-size vehicles.

Effects of Alternatives Considered in Detail

Below is a brief description of the effects of alternatives that were considered in detail.

No-Action Alternative

This alternative provides a baseline for comparison of environmental consequences of the proposed action to the existing condition and is a management option that could be selected by the Responsible Official. Under this alternative, watershed resources in the Lightning Creek drainage would remain in a state where roads would continue to pose a chronic source of risk to

watershed conditions and sediment would continue to affect water quality and aquatic ecosystems in the basin (EA, p. 20). Because there would be no road decommissioning or conversion of roads and motorized trails to nonmotorized trails under this alternative, there would be no additional decrease in total motorized or open motorized road densities or increase in grizzly bear core habitat or security within the North Lightning or Scotchman bear management units (EA, p. 33). Recreationists would continue to be displaced and would likely go to other areas for their recreational experience with the lack of repaired roads in the drainage. The recreation opportunity setting would not be compliant with the ROS designations for roaded natural and roaded modified settings in the Forest Plan (EA, p. 47). This alternative would also not meet the purpose and need for this project.

Alternative 3

This alternative was designed to restore as much of the pre-flood access in the watershed as is reasonable given constraints related to budgets and compliance with environmental laws and regulations. This alternative was requested by some members of the public, and was deemed a reasonable alternative to consider that still meets the purpose and need for the project. It would result in a long-term decrease in road densities and risk of road failure in sensitive landtypes compared to pre- and post-flood conditions (EA, pp. 23-24), which would be a benefit to both water and aquatic ecosystems (EA, p. 23). Road reconstruction, primarily on the East Fork road 1184 and within the riparian area of East Fork Creek would result in a road within the riparian area that continues to be at high risk for future failure (EA, p. 24). This alternative would have the greatest potential for disturbance due to reconstruction of Forest Road 1184, which is in close proximity to goshawk nesting habitat (EA, p. 44). Replacing the Porcupine Bridge with a triple span bridge would eliminate the risk of motorists damaging their vehicles on streambed substrate while fording the side channel (EA, p. 25) and would restore motorized access to Porcupine Lake (EA, p. 48). This alternative would have the greatest potential for disturbance or displacement to wildlife because it would have the greatest amount of road reconstruction and more miles of drivable roads and motorized trails in riparian habitat conservation areas after project completion (EA, pp. 33-46). Decommissioning and converting roads to trails would reduce open road access (EA, p. 47). Noxious weed monitoring and treatment would occur to reduce the spread of noxious weeds. Restoring access to the drainage would increase use by vehicles and may increase risk of weed spread (EA, pp. 52-53).

I did not select Alternative 3 because it would not improve grizzly bear secure habitat as well as the selected alternative and would not address the declining road maintenance budget in a drainage that requires continuous costly road repairs/maintenance nor does it address aquatic concerns related to roads in riparian areas and roads at risk of failure.

Alternative 4B

This alternative was developed to show the trade-offs between providing motorized access on road 2240 (Alternative 4A) and removing access by decommissioning road 2240 (Alternative 4B) while still keeping environmental impacts low. The difference between this alternative and the selected alternative is very nominal. Under Alternative 4B, there would be a slightly lower potential for disturbance or displacement for most wildlife species following project completion because Forest Road 2240 would be decommissioned (EA, pp. 33-45). There would be a slightly lower road density in Lightning Creek watershed and a slightly higher road density within riparian areas in the watershed. All other resource issues evaluated in the EA do not show any change between the options A or B (EA, pp. 21-30 and 45-54). Since the differences in effects between options A and B were negligible, I decided to select option A, which allows motorized use on 2240.

Compliance with Forest Plan Standards and Guidance

The Lightning Creek project area consists of MAs 2, 3, 4, 9, 10, 11 and Inland Native Fish Strategy riparian habitat conservation areas. The selected alternative will meet all management area standards and goals.

II. Findings Required by Other Regulations and Policies

To the best of my knowledge, this decision complies with all applicable laws, regulations, and policies (DN/FONSI, p. 15; EA pp.22-54; and Aquatics Report pp. 40-42, Wildlife Report pp. 31, 36, 43, 48, 53, 56, 62, and 66, Road and Recreation Report p.19).

Clean Water Act

The selected alternative will be consistent with the requirements of the Clean Water Act, 33 U.S.C. §1251. Sediment and temperature, the pollutants of concern, will not increase in the water quality limited segment on Lightning Creek or its tributaries. Risks to beneficial uses in Lightning Creek will not be changed by this project. In compliance with the current TMDL status, there will be significant gains made toward the attainment of pollutant load reductions through the proposed management activities in Lightning Creek (Aquatics report, p. 41; EA, pp. 21-27).

Endangered Species Act

The selected alternative is consistent with the Endangered Species Act (Wildlife, Aquatics, and TES Plants Reports). See item 9 in the Finding of No Significant Impact section below.

National Historic Preservation Act

The selected alternative complies with the National Historic Preservation Act (DN/FONSI, p.12; DN Appendix A, p. 26). Reports are completed for this project area and no cultural sites will be impacted with the selected alternative. Native American tribal representatives were given the opportunity to comment and no concerns were expressed (FONSI, p.12; project file, Section G)

Executive Order 11988 and 11990 - Floodplain Management and Protection of Wetlands

The selected alternative meets the requirements of Executive Order 11988, which apply to protection of floodplains. These features are protected through implementation of best management practices and Forest Plan standards and guidelines. The riparian restoration components of the project are designed to improve condition of riparian areas and floodplain function (DN/FONSI, p. 11, Aquatics Report p. 41; EA, pp. 21-27).

Executive Order 12962 – Recreational Fishing

The selected alternative is consistent with this executive order regarding aquatic systems and recreational fisheries. Short-term effects may affect westslope cutthroat trout individuals, but would not lead toward a trend in federal listing. Long-term effects (i.e., net reduction in sediment) are expected to benefit westslope cutthroat trout survival and habitat (DN/FONSI, p. 10, Aquatics Report p. 41; EA, pp. 21-27).

State of Idaho Governor's Bull Trout Plan

The selected alternative is consistent with the direction in the Governor's Bull Trout Plan. Long-term effects from the decommissioning of roads with known sediment sources are expected to benefit bull trout and their habitat (DN/FONSI, p. 12 and Aquatics Report p. 42; EA, pp. 21-27).

Executive Order 13112 (February 1999)

Executive Order 13112 directs Federal agencies 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 will meet the intent stated in Executive Order 13112 for moderate control, through the implementation of design features. Weed populations in the project area are low to moderate in density. Monitoring for noxious weeds will help identify areas needing treatment and follow-up treatments, and all weed treatments will be done in accordance with the Sandpoint Noxious Weed Control Project Environmental Impact Statement (DN/FONSI, p. 11, Noxious Weeds Report, p.8-9; EA, pp. 52-54).

III. Finding of No Significant Impact

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 means that the significance of an action must be analyzed in several contexts (i.e. local regional, worldwide), and over short and long time frames. For site-specific actions significance usually depends upon the effects in the local rather than in the world as a whole. This project is limited in scope and duration. The project was designed to minimize environmental effects through road reconstruction and decommissioning locations, bridge design and location, and design features. The project will be implemented during the summer and fall months over a period of six years (EA, pp.67-73).

Intensity refers to the severity of the expected project impacts. The following factors were considered to evaluate intensity.

1. Impacts that may be both beneficial and adverse

Both beneficial and adverse impacts have been considered in the evaluation of the environmental consequences of the proposed action and alternatives actions. Beneficial effects have not been used to offset or compensate for potential adverse effects. Singularly and collectively, the resources affected by the proposed activities in all alternatives are not expected to cause significant impacts.

The adverse impacts associated with the selected alternative include the following:

- Excavation and installation of culverts could generate some sediment during brief periods of operation (EA, p. 21).
- Installation of riprap, rootwads, and log vanes used to protect roads and streambanks from erosion could produce suspended sediment during brief periods of operation (EA, p. 21).
- Road work on Lightning Creek road 419 would produce suspended sediment during periods of operation, but the short-term production of sediment would be less than what is generated through the chronic delivery of sediment from over-steepened raw cut banks immediately adjacent to the stream (EA, pp. 21-22).
- Reconstruction and rerouting of road segments could generate sediment during periods of operation; however, site-specific mitigation measures and best management practices will be used to reduce sediment input (EA, pp. 21-22).
- Short-term potential sediment generation associated with culvert removals and upgrades, streambank stabilization, and bridge construction or removal, could have localized effects to individual fish (EA, p. 29).

- During and immediately following project activities there is potential for short-term negative impacts on bull trout or westslope cutthroat trout, if present, within close proximity to work sites due to the possibility of increased sediment delivery and turbidity (EA, p. 30).
- There is a possibility of temporary disturbance and displacement of grizzly bears, gray wolf, Canada lynx, wolverine, goshawk, elk, and a temporary impact to grizzly bear core habitat and security from project activities (EA, pp. 33-45).
- There is a possibility of disturbance to harlequin ducks and an increase in sediment delivery to streams that could temporarily reduce the suitability of the streams breeding habitat (EA, pp.42).
- There is a possibility of displacement and/or mortality to western toads as result project activities (EA, pp.43).
- Use of explosives to remove culverts in site-specific situations could result in a shortened duration of disturbance to fish and sediment production (EA, p. 22).
- Permanent displacement of motorized recreation access in the drainage will occur from road decommissioning. Motor vehicle access will be reduced and motorized trail access will change (EA, pp. 46-48).
- There is a low risk of introduction and establishment of new weed invaders to the project area. Weed infestations may expand to inaccessible areas that were affected by the 2006 flood event; these could provide a long-term seed source for expansion elsewhere in the project area. The risk of expansion of these infestations could be low to high, depending on the location and extent of future disturbances and their proximity to existing untreated infestation (EA p. 54).

The beneficial effects of the selected alternative include the following:

- Road resurfacing will have a beneficial effect to watershed and fisheries resources through the reduction of sediment, installation of streambank stabilization structures will help reduce the chronic sediment delivery to streams (EA, p. 21).
- Realignment and revegetation of road 419 will help reduce future road damage and help in the restoration of riparian areas (EA, p. 22).
- Installation of point bar structures will reduce stream energy, the recruitment of woody debris and formation of aggregates, and the creation of a stable depositional environment during high flows and increased aquatic habitat complexity, and overall improved channel stability (EA, p. 22).
- Bank stabilization will decrease bank erosion and instream sedimentation and potentially increased recruitment of woody debris and formation of debris jams, as well as improved habitat complexity contributing to a trend in improved water quality conditions (EA, p. 23).
- Reducing riparian road densities will result in a reduction in hydrologic connectivity of roads to streams (EA, p. 23).
- Road decommissioning will create a long-term improvement of watershed condition through a decrease in road densities and a long-term reduction of chronic sediment delivery to streams (EA, p. 25).
- Long-term benefits from road improvements will trend Lightning Creek and its tributaries toward higher quality fish habitat and therefore result in higher spawning success rates and individual survival of fishes (EA, p. 30).

- Road decommissioning will increase secure habitat for grizzly bears, wolverines, goshawk, and elk (EA, pp. 33-45), and trend toward providing more effective habitat for many species by reducing the miles of drivable roads and road densities in the long-term (EA, pp. 36).
- A decrease in miles of roads, and groomed snowmobile routes over the existing condition will result in an increase in secure habitat for lynx in the Lightning LAU (EA, pp. 38).
- Area streams will trend toward a better aquatic condition that will be more able to support breeding harlequin ducks and improve western toad breeding habitat (EA, pp. 41-42).
- Nonmotorized trails will increase (EA, pp. 48-49).

No Effect

Project design features effectively eliminated, or reduced to negligible, most of the potential impacts; therefore, implementation of the selected alternative would result in no effect to the following resources: threatened, endangered and sensitive plant species (EA, p.50), cultural and heritage resources (DN Appendix A, p. 19). The Wildlife and Rare Plants reports contain a list of species that were not analyzed in detail because there would be no effects to those species from the proposed actions.

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

Incorporating design features related to Engineering and Public Safety such as temporary road closures during road reconstruction and bridge construction, and placing warning signs at strategic locations, will limit risks to the public traveling on the Lightning Creek road 419 during road and bridge work and will result in no significant adverse effect on public health and safety (DN Appendix A, p. 20). Design features are also in place for use of explosives. The use of Forest Service Health and Safety Code Handbook's Guide for Using, Storing, and Transporting Explosives and Blasting Materials (FSH 6700) will result in no significant adverse effect on public health (DN Appendix A, p. 21).

3. Unique characteristics of the geographic area

The selected alternative will not have a significant effect on unique resource characteristics. Surveys to locate heritage resources within the Lightning Creek Restoration project have been completed. No significant cultural resources have been identified within the ground-disturbing portions of the project and no concerns have been expressed by the tribes. No other unique characteristics such as prime wetlands exist in the project area.

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

As used in the Council on Environmental Quality's guidelines for implementing NEPA, the term "controversial" refers to whether substantial dispute exists as to the **size, nature, or effects of the major federal action** rather than to the existence of opposition to a use. There is wide professional and scientific agreement on the scope and effects of the selected alternative on the various resources, as cited in the discussion of effects to resources and in references to specialist reports (EA, pp. 19-54). Based on the findings of the analyses, the effects of the activities in the Lightning Creek drainage on the quality of the human environment are not highly controversial.

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

Analysis of the selected alternative considered the effects of past actions and events, as a frame of reference in conjunction with scientifically accepted analytical techniques, available information,

and best professional experience and judgment to estimate effects to the human environment. Mitigation listed in the Appendix A of the DN and in the project file is based on science and/or past monitoring, and is incorporated into the design of the selected alternative. There are no uncertain or unique effects of project activities that have not been previously encountered or that would constitute an unknown risk to the human environment.

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

The selected alternative consists of activities that are not new or unique in type, size or intensity and are consistent with all laws, regulations and policy including management direction in the Forest Plan. All future actions, except those analyzed and incorporated into the selected alternative, would be analyzed on their own prior to implementation. Implementation of the selected alternative would not establish a precedent for future actions.

7. Whether the action is related to other actions with individual insignificant but cumulative significant impacts

According to the Council on Environmental Quality (NEPA) regulations “cumulative impact” is the impact on the environment which results from the incremental impact of the selected alternative when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions (40 CFR 1508.7).

The relevant boundaries and projects assessed for cumulative effects vary by resource. Each resource cumulative effects analysis area can be different and possibly larger or smaller. Relevant cumulative effects are discussed for each resource in the EA (Watershed and Hydrology pp. 21, 27; Fisheries pp. 29, 30-31; Wildlife pp.35, 36, 38, 40, 42, 43, 44, 45; Roads and Transportation pp. 49-50; Threatened and Endangered Plants p. 51; and Weeds pp. 53-54). Each cumulative effects analysis for each environmental component or resource area is guided by and consistent with the Cumulative Effects Considerations of Past Actions (40 CFR 1508.7) in accordance with the Council on Environmental Quality Guidance Memorandum on the “Consideration of Past Actions in Cumulative Effects Analysis” dated June 24, 2005. A listing of relevant related past, present and future management activities in the Lighting Creek Restoration Project is provided in the EA (p. 19) and in the project file.

The effects of the selected alternative combined with the effects of past, present, and reasonably foreseeable actions will not have any significant cumulative effects. The selected alternative will have no effect on some resources (see #1 above) and no cumulative effects.

8. The degree to which the action may adversely affect districts, sites, highway structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources

There are no known cultural sites that would be impacted by the selected alternative (DN Appendix A, p. 26). Consultation with the Kootenai Tribe of Idaho, Kalispel Tribe of Indians, Coeur d'Alene Tribe, and the Confederated Salish and Kootenai Tribes on this project was done by our North Zone Heritage manager. No concerns were expressed about the proposal (project file, Section G).

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 of 1973

Bull trout – The implementation of the selected alternative is likely to adversely affect bull trout because of the potential for short-term disturbance or displacement during project activities but not likely to adversely affect designated critical habitat. The long-term effect from road rerouting, improvements, and decommissioning, along with stream bank stabilization, point bar structures, and stream crossing improvements are all designed to improve bull trout habitat (EA, pp. 30 - 31).

Westslope cutthroat trout - Due to the potential for short-term disturbance or displacement, the implementation of the selected alternative may impact individuals or habitat, but would not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species. The long-term effect from road rerouting, improvements, and decommissioning, along with stream bank stabilization, point bar structures, and stream crossing improvements are all designed to improve aquatic habitat (EA, pp. 30 - 31).

Grizzly bear - The implementation of the selected alternative is likely to adversely affect grizzly bears or their habitat during project activities because of the potential for short-term disturbance or displacement associated with the project. However, the proposed actions would not likely cause direct mortality of any individuals. There would be a temporary impact to core habitat and security from project activities, but no reduction in the amount of core, and only a temporary reduction in security. There will be a short-term impact to grizzly bear core habitat and security that could potentially disturb and displace grizzly bears. Following project implementation, and as each subdrainage recovers from the disturbance associated with project activities, the Scotchman and North Lightning bear management units will have a substantial increase in their ability to support grizzly bears. This increase is largely due to the reduction in miles of drivable roads and the conversion of Trail 52 to nonmotorized, which leads to more secure habitat. (EA, p. 34).

Gray wolf - The implementation of the selected alternative may affect, but is not likely to adversely affect the gray wolf, due to the potential for short-term disturbance to individuals that may utilize the area as transients during project activities. Project activities could potentially temporarily cause a disturbance or displacement of wolves (EA, p. 37). As a result of project activities, there would be an increase in secure habitat available to wolves following project activities (Wildlife report, p. 34).

Canada lynx - The implementation of the selected alternative may affect, but is not likely to adversely affect Canada lynx because of the potential for short-term disturbance or displacement associated with the project. There would be a possibility of disturbance and temporary displacement of lynx during project implementation. The increased noise and activity levels above natural conditions within or in close proximity to lynx habitat during the implementation of the project could potentially temporarily displace lynx from the affected area. The probability of this occurring is expected to be low because of the low density or absence of lynx within the affected area (EA, p. 39). There would be an increase in secure habitat available to lynx following project activities. Along with the increase in the security of lynx habitat, the decrease in road and motorized trail miles would increase the connectivity of lynx habitat, allowing lynx to more easily travel between areas with the appropriate habitat characteristics (Wildlife report, p. 41).

U.S. Fish and Wildlife Service Consultation - On February 9, 2009, the U.S. Fish and Wildlife Service issued a biological opinion agreeing with our determinations of effects to threatened and

endangered species in the project area. The biological opinion determined that implementation of the proposed project is not likely to jeopardize the continued existence of the grizzly bear (*Ursus arctos horribilis*) or bull trout (*Salvelinus confluentus*). It also concurred with our determination that implementation of the proposed project "may affect, but is not likely to adversely affect" gray wolves (*Canis lupus*) or Canada lynx (*Lynx canadensis*) (project file – Section C and D – Fisheries/Hydro and Wildlife).

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

The selected alternative meets Federal, State, and local laws for water quality, fisheries, wildlife, road and recreation, threatened and endangered species, noxious weeds as referenced through the individual resource reports (EA, pp. 22-54). Cultural resources discovered in areas where actions occur would be protected (DN Appendix A, p. 27). This project also meets National Environmental Policy Act disclosure requirements (Lightning Creek Restoration EA).

Conclusion

Based on the information presented in the environmental assessment and associated specialist reports, the Lightning Creek Project will not have a significant effect on the human environment; therefore, an environmental impact statement does not need to be prepared.

IV. Review and Appeal Opportunities

The documents cited in this decision notice can be obtained from the Sandpoint Ranger District office in Sandpoint, Idaho or from the Idaho Panhandle National Forests website: www.fs.fed.us/ipnf/eco/namage/nepa/index.

Project file documents are located at the Sandpoint Ranger District.

This decision is subject to appeal pursuant to 36 CFR 215.11. A written appeal must be submitted within 45 days following the publication date of the legal notice of this decision in the Coeur d'Alene Press, Coeur d'Alene, Idaho. It is the responsibility of the appellant to ensure their appeal is received in a timely manner. The publication date of the legal notice of the decision in the newspaper of record is the exclusive means for calculating the time to file and appeal. Appellants should not rely on date of timeframe information provided by any other source.

Paper appeals must be submitted to one of the following:

USDA Forest Service, Northern Region
ATTN: Appeal Deciding Officer
PO Box 7669
Missoula, MT 59807

USDA Forest Service, Northern Region
ATTN: Appeal Deciding Officer
200 East Broadway
Missoula, MT 59802

Office hours: Monday through Friday, except national holidays, 7:30 a.m. to 4:00 p.m.

Electronic appeals must be submitted to: appeals-northern-regional-office@fs.fed.us. In electronic appeals, the subject line should contain the name of the project being appealed. An automated response will confirm your electronic appeal has been received. Electronic appeals must be submitted in MS Word, Word Perfect, or Rich Text Format (RTF).

It is the appellant's responsibility to provide sufficient project-or activity-specific evidence and rationale, focusing on the decision, to show why my decision should be reversed. The appeal

must be filed with the Appeal Deciding Officer in writing. At a minimum, the appeal must meet the content requirements of 36 CFR 215.14, and include the following information:

- The appellant's name and address, with a telephone number, if available;
- A signature, or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal);
- When multiple names are listed on an appeal, identification of the lead appellant and verification of the identity of the lead appellant upon request;
- The name of the project or activity for which the decision was made (Lightning Creek Restoration), the name and title of the Responsible Official (Richard Kramer, District Ranger), and the date of the decision;
- The regulation under which the appeal is being filed, when there is an option to appeal under either 36 CFR 215 or 36 CFR 251, subpart C;
- Any specific change(s) in the decision that the appellant seeks and rationale for those changes;
- Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement;
- Why the appellant believes the Responsible Official's decision failed to consider the substantive comments; and
- How the appellant believes the decision specifically violates law, regulation, or policy.

If an appeal is received on this project, there may be informal resolution meetings and/or conference calls between the Responsible Official and the appellant. These discussions will take place within 15 days after the closing date for filing an appeal. All such meetings are open to the public. If you are interested in attending any informal resolution discussions, please contact the Response Official or monitor the following website for postings about current appeals in the Northern Region of the Forest Service: http://www.fs.fed.us/r1/projects/appeal_index.shtml.

V. Implementation Date

If no appeal is received, implementation of this decision may occur five business days from the close of the 45-day appeal-filing period. If an appeal is received, implementation may not occur for 15 days following the date of appeal disposition.

I am the responsible official for this decision. For more information regarding this project, contact project team leaders Jason Gritzner (208) 265-6654 or Nancy Kertis (208) 265-6616 at the Sandpoint Ranger District.

RICHARD P. KRAMER
District Ranger

Date

Appendix A – Details of the Selected Alternative

Riparian and Aquatic Habitat Improvement

Riparian and aquatic habitat improvement will take place in lower East Fork Creek, Rattle Creek, and Lightning Creek. In East Fork Creek, this includes the installation of near-vertical log sections on point bars that will help slow floodwater velocities, and to trap and maintain free-floating woody debris at flood stage in order to promote the formation of debris jams. In Lightning Creek, Rattle Creek (in the area of the 419 crossing), and East Fork Creek, it will include creating log vanes, root wads, and engineered debris jams along with riparian planting to help protect banks from excessive erosion while providing some habitat complexity to aquatic organisms. This activity will help to attain the Forest's riparian management objectives (RMOs) for improving bank stability, riparian and aquatic habitat complexity, and providing shade to the stream channel. This will also contribute to meeting water quality objectives outlined by the IDEQ for reducing sediment and instream temperature.

Lightning Creek Road 419

Road work on Lightning Creek road 419 includes road reconstruction and construction of a bridge across East Fork Creek. Road reconstruction (see Table 1 and Figure 1) will include:

- removing soil, rock and sediment deposited on the road surface from tributary drainages
- replacing drainage structures (culverts) and associated road fill
- resurfacing
- rerouting the road at mileposts 5.0, 13.1, and 14.2. These are areas where Lightning Creek scoured away sections of road fill during the flood and will continue to be damaged if rebuilt in the same location.
- a new 110- to 150-foot bridge will be constructed across the East Fork of Lightning Creek.

East Fork Lightning Creek Road 1184 and Road 1030

The first one-half mile of road 1184 from its junction with road 419 will be kept as open to motorized vehicles to provide access to dispersed campsites along the creek. A trailhead and parking area will be constructed to accommodate room for a vehicle towing a trailer to turn around. The parking area will be level with a gravel surface. The old road prism will be blocked with large boulders to prevent motorized use but allow for the safe passage of pack stock, mountain bikes, and hikers. Trailhead signs will be installed.

The remainder of road 1184 (1.3 miles) and all of road 1030 (6 miles) will be converted to nonmotorized system trails. These segments will become extensions of other existing trails in the area (trails 212 and 134).

Rattle Creek Road 473

Decommission Lower Half of Road – Due to the extreme instability of the Rattle Creek drainage and no practical or economical options for restoring and reconstructing this road (see EA, page 75), the Rattle Creek road will be decommissioned from its junction with road 419 for 3.2 miles east to below the bridge in section 5. A short unclassified road located in the same area (473UA, 0.2 mile) will also be decommissioned. Decommissioning will consist of a variety of techniques that include removing exposed and failing fill adjacent to the stream channel, full and partial recontouring, surface ripping, installing waterbars, removing culverts and bridges, and

seeding and mulching. At Rattle Creek junction with road 419, a small parking area will be constructed and dispersed campsites will be restored.

Convert 3.7 Miles to Nonmotorized Trail - From below the bridge in section 5 east to Clatter Creek, what remains of the road prism will be converted to a nonmotorized system trail. This will provide nonmotorized recreational access to the upper portion of the Rattle Creek watershed and trails, and contribute more area to grizzly bear habitat security.

A trailhead and small parking area will be constructed at Clatter Creek to accommodate room for a vehicle towing a trailer to turn around. The parking area will be level with a gravel surface. The old road prism will be blocked with large boulders to prevent motorized use but allow for the safe passage of pack stock, mountain bikes, and hikers. Trailhead signs will be installed. Dispersed campsites along the nonmotorized trail will be retained.

Maintain Upper Section of Road from Clatter Creek to the Montana border - On this upper section, the Rattle Creek road will be maintained as open to motorized vehicles for 1 mile from the Montana border.

Access to NRCS Permitted Site

Construct Short OHV Trail for NRCS Administrative Use - Because under this alternative, the area where NRCS has accessed the site from Rattle Creek road will be converted to a nonmotorized trail, a new access trail will be constructed. This trail will be between 700 and 1,200 feet in length with a 60-inch-wide tread to accommodate permitted OHV use only. A gate and sign will be installed to allow administrative use only.

Porcupine Road 642

Convert to OHV Trail – Due to lack of funding and the inability to construct an environmentally acceptable approach to the existing concrete bridge span across Lightning Creek (see page 60), the Porcupine road (5 miles) will be converted to a motorized OHV system trail. Access to the Porcupine Road and campsite at Porcupine Lake will be limited to motorized vehicles less than 50 inches and nonmotorized use. Where culverts and other drainage features are removed along road 642, appropriate grades will be constructed in and out of culvert removal sites and drainages to accommodate safe OHV crossing.

Recreationists will ford Lightning Creek to access the Porcupine Road. The existing concrete bridge span will be removed. A trail tread suitable for OHVs with a 60-inch riding surface will be constructed on each side of the ford at Lightning Creek to provide OHV access to the creek from Road 419 (Lightning Creek road) and road 642 (Porcupine).

A parking area will be constructed along road 419 near the ford site to accommodate 15 vehicles with trailers. The parking area will be level with a gravel surface and ample room to turn around. Boulders will be installed on either side of the ford to prevent vehicles larger than 50 inches from crossing the creek.

The toilet at Porcupine Lake will be removed and the vault will be filled in. The toilet site will be capped with boulders and a wilderness composting toilet will be constructed.

Mud Creek Road 340

Convert Road to Nonmotorized Trail - The first 0.4 mile of this road is open to motorized vehicles and will remain open to access a rock pit and a dispersed campsite. The remainder of this

road, which is currently closed to motorized use, will be decommissioned and converted to a nonmotorized trail (2.8 miles). A trailhead sign will be installed.

Road 2240

Convert 2.5 miles to OHV trail – Converting 2.5 miles of this road to an OHV trail will provide a loop opportunity in conjunction with road 489 and Strong Creek trail 444. Auxor road 489 will be open to high-clearance motorized vehicles as it was prior to the flood. Information signs will be installed to inform the public of these access changes.

Road 1091A (Lunch Peak Spur Road)

Convert to Nonmotorized Trail and Decommission - This road, which is currently closed to motorized use, will be converted to a nonmotorized trail from its junction with road 1091 for 0.6 miles. This will become an extension of system trail 526. The remainder of the road (0.9 mile) will be decommissioned.

Roads 1091 B and C

Decommission Roads - These roads will be decommissioned to provide additional areas for grizzly bear habitat security (3.3 miles).

Decommissioning of Existing Closed Roads

Road decommissioning will occur on 46 miles of closed roads throughout the Lightning Creek watershed. These roads are grown in or were already closed for grizzly bear habitat protection. Although these roads are currently closed to motorized vehicle traffic, they still contain drainage structures and design features, or traverse areas of high mass failure potential that pose a risk to watershed resources.

Lake Darling Trail 52

Convert Single-track Motorized Trail to Nonmotorized Trail - Lake Darling trail will be converted to a nonmotorized trail to provide secure habitat for grizzly bears and to comply with Forest Plan management area direction. Information signs will be installed at the trailhead regarding new access changes and restrictions.

Design Features, Mitigation Measures and Monitoring

Design features are measures that tend to be routine elements of project design.

Mitigation measures are prescribed to prevent or reduce adverse effects to the environment and forest visitor experiences during project implementation. See individual specialist reports for detailed rationale regarding effectiveness.

Design Features

Features Related to Threatened, Endangered, Sensitive and Rare Species Management

Wildlife Species – If any threatened, endangered, or sensitive species were located during project implementation, management activities will be altered, if necessary, so that proper protection measures could be taken. Protection of threatened, endangered, and sensitive species will be included in any contract.

Rare Plant Species

- No restoration activities will occur in or near any currently documented rare plant occurrences.
- A qualified botanist will assist with identification of the proposed NRCS administrative OHV access route to ensure protection of rare plant populations.
- If proposed ground-disturbance locations change during project implementation, a qualified botanist will review final activity locations as needed and work with other project specialists to reduce or eliminate risks to any newly documented rare plant occurrences or suitable rare plant habitat.
- If additional areas are proposed for new ground disturbance, rare plant surveys will be conducted, with additional mitigation measures designed as needed to reduce or eliminate risks to newly documented rare plant occurrences or suitable rare plant habitat.

Features Related to Engineering and Public Safety

Transportation and Safety on Roads – Lightning Creek road 419 will be used for hauling of rock, transportation of bridge structures, and general contractor use. During this time, the following will be used depending on the situation:

- Signs warning of heavy truck traffic will be posted at the portal and north end of Lightning Creek.
- Dust abatement will be used as needed on National Forest roads to control dust and maintain driver safety.
- Flaggers will be used when needed to direct traffic.
- Lightning Creek road 419 will be closed to public access the first construction season for public safety. A gate will be placed at mile marker 3 on Lightning Creek and one half mile above Fall Creek to prevent public access. All road reconstruction and bridge work will be completed during this time period. During road closure, signs will be posted at the entrance of both Lightning and Trestle Creek roads.
- Sections of Lightning Creek road 419 could be closed for periods of time during road decommissioning. During road closure, signs will be posted at the entrance of both Lightning and Trestle Creek roads.
- A news release will be placed in the Bonner Daily Bee indicating the dates and potential delays related to the road work on Lightning Creek.

Drainage Structures – Concrete grated open top drainage structures will be installed along Lightning Creek road 419. They will be used in areas where bedload and debris periodically are deposited from drainage ways onto the roadway.

Raising Road Grade – In areas prone to flooding on Lightning Creek road 419, the road grade will be raised. Rock, riprap and large woody debris will be used to raise the grade, providing resistance to damage from floodwaters and keeping the road surface from being washed away during flooding.

Culvert Installation and Stabilization - Oversized culverts will be installed along Lightning Creek road 419 in order to accommodate excess flows and reduce blockage of culvert by bedload or debris. See mitigation measures related to culvert installation, below.

East Fork Bridge Construction – Bridge design will include the follow design criteria:

- High vertical distance will be created between the bottom of the girders and the elevation of water flow under the bridge during high water events.
- A span of 100 to 150 feet will be used to allow room for the active channel to flow in an impeded manner under the bridge.
- Steel H pile construction will be driven a significant distance below the streambed to eliminate undercutting of the bridge foundation.
- Relief channels will be constructed to accommodate excess flows.
- Mafic rock riprap will be used to give the riprap a higher degree of integrity due to the increased rock weight.
- Grouted riprap will be used to reduce the chance of individual riprap fragments coming loose.
- Integrated log structures and riprap will be used to channelize flow and protect the streambank approaches to the bridge.
- Instream equipment operation will occur after July 15 during low-flow conditions to protect habitat for spawning westslope cutthroat trout
- In stream work will be halted on September 1 to protect bull trout redds.
- Riparian areas will be seeded and/or planted as needed to help restore disturbed sites.

East Fork Bridge – A temporary bridge will be placed over the East Fork crossing to facilitate road reconstruction and associated vehicles to access sites above the crossing. The temporary bridge will be removed after access for reconstruction work is no longer needed.

Porcupine Bridge Removal - Removal of the Porcupine Bridge will include the following:

- To minimize sediment from bridge removal activities, instream equipment operation will occur during low-flow conditions to protect bull trout and westslope cutthroat trout.
- To achieve the maximum sediment delivery reductions in the shortest timeframe, work adjacent to live stream channels will be permitted after the usual September 15 date, subject to review by the fisheries biologist or hydrologist. Work may be halted in the event of heavy fall rains or early snow.
- Additional mitigation features, such as silt fencing may be required at those locations.
- In-channel work will be halted on September 1 to protect bull trout redds.
- Sediment barriers will be installed along Lightning Creek during bridge removal operations in order to capture sediment entering Lightning Creek
- Riparian areas will be seeded and/or planted as needed to help restore disturbed sites.

Features Related to Explosives and Public Safety

All roads requiring the use of explosives are either brushed in or physically closed (gated or bermed). Blasting work will be done in accordance with Federal, State and local guidelines, as well as within the parameters of the Forest Service Health and Safety Code Handbook's *Guide for Using, Storing, and Transporting Explosives and Blasting Materials* (FSH 6700).

Mitigation Measures

Research supporting effectiveness of mitigation measures is located in the project file.

Measures Designed to Protect Water Quality and Aquatic Habitat and Species

Best Management Practices – All activities will be designed to protect water quality and fisheries habitat. Best Management Practices (BMPs) are the primary mechanism to enable the achievement of water quality standards. The Forest Service Handbook 2509.22 (Soil and Water Conservation Handbook) outlines BMPs that meet the intent of the water quality protection elements of the Idaho Forest Practices Act. Site-specific best management practices that have been designed for these alternatives and are part of the design criteria are described more fully in Appendix A of the Aquatics Report.

Road Decommissioning – All road decommissioning will be accomplished with techniques appropriate to site-specific conditions. This may include full and partial recontouring; surface ripping or subsoiling for decompaction, removing all culverts; stabilizing fill slopes and restoring stream channel crossings back to natural grade. Seeding, fertilizing, mulching and/or placement of woody debris will follow to prevent erosion, establish desired vegetation and prevent noxious weed spread. Some road segments that are stable, hydrologically inert, and well vegetated may need no treatment. Decommissioned roads will be recontoured for one sight distance from the beginning of the road and a permanent closure structure, such as large boulders, will be put in place to eliminate the unauthorized, motorized use of the road.

Hydro-mulching – Various sites of soil disturbance associated with road reconstruction and/or decommissioning will require hydro-mulching within critical areas such as wet areas. Mulching will occur immediately following road reconstruction/decommissioning activities are complete.

Spot Gravelling – To help reduce sediment delivery to streams, spot gravelling with approximately 6 inches of gravel will be required on high traffic roads at stream crossings, perennial wet areas, and other sensitive areas as needed.

Inland Native Fish Strategy Requirements – All activities will be designed to reduce impacts to aquatic habitats. A description of each applicable INFS standard and guideline and details regarding its estimated effectiveness can be found in Appendix B of the Aquatics Report.

Road Surface and Stream Crossing Maintenance to Improve Aquatic Habitat – The main source of erosion and sediment delivery from roads is usually from the road surface. Road maintenance activities that focus on reducing sediment delivery are blading along the road prism; spot surfacing at stream crossings; installing relief culverts where ditch lengths are too long; cleaning and improving ditches; cleaning the inlet and outlets of culverts; and installing rolling dips and outlet ditches. These activities will help improve road surface drainage and decrease sediment delivery to stream channels.

Road/stream crossings that pose a hazard and risk to aquatic species and their habitat from potential culvert failure, chronic sediment delivery, or a barrier to fish passage have been evaluated throughout the project area. Recommendations for each crossing may include replacing, redesigning or upgrading crossings as needed.

Sediment Reduction during Culvert Installation - Specific mitigation features to control sediment delivery during culvert installation and maintenance consist of the following:

- Standard erosion control measures such as temporarily diverting flow into a culvert, a plastic or rock-lined channel, pumping water below the site, or use of silt fences or hay bales will be used to minimize sediment transport downstream.

- Ditch relief pipes will be installed at a skew of 3% off of the road grade and have a minimum of a 5% grade. Installing relief pipes at an angle allows the pipe to be somewhat self-maintaining.
- Pipe locations will be marked with a flexible plastic marker to ease finding the pipes for future monitoring and maintenance. Clearly marking the location of the relief pipes and stream crossings will allow individuals assigned to regular maintenance to more easily locate pipes and track maintenance needs.

Rootwads and Large Woody Debris (LWD) to Stabilize Road Fill and Mitigate Bank Erosion – Rootwads (LWD with rootwad attached) and LWD will be utilized for toe slope protection of road fills, structures built within the floodplain, and unprotected banks adjacent to flowing water. Rootwads and LWD will be incorporated into the fill material on road reconstruction sites to serve as flow deflectors and armoring against high velocity turbulent flows where shear stress rates and erosion in the near bank region are much higher. Rootwads and LWD will also be used in the channel at specific sites to deflect high velocity erosive flow and/or serve a multiple purpose as fish habitat creators. One particular site where this will be utilized is at the toe of the large mass failure above the bridge construction site at the East Fork of Lightning Creek.

Measures Designed to Protect Wildlife and Habitat

Preventing Public Use of Closed Roads During the Project – To prevent establishment of motorized public use patterns on currently undrivable roads that are opened for project activities, the roads will be managed as follows:

- If roads are reopened prior to use for the project, they will be closed to public motorized use with a gate or other effective closure device.
- Once project activities start, the roads will remain closed to public use with a gate. Gates will be closed behind project vehicles and will remain closed during periods of inactivity.
- After completion of project activities, the roads will remain closed to public motorized use with a gate or other effective closure device until the road is decommissioned or put into storage.
- Decommissioning or storage activities will occur as soon as possible after completion of project activities.

Preventing Public Use of Restricted Roads During the Project – To prevent the unauthorized motorized use of roads that are currently managed as restricted, gates will be closed behind project vehicles and will remain closed during periods of inactivity.

Reducing Disturbance from Explosives – Explosives will be used wherever feasible, particularly on currently impassible roads, to reduce or eliminate the need for opening up these roads to motorized vehicles and potential unauthorized motorized use. The number of explosions per site will be kept to the minimal amount necessary and methods of reducing the noise level during explosions will be incorporated on a site-by-site basis to achieve the lowest level of

Explosives Terms and Definitions

The **nonel system** is a non-electronic system, which is the most versatile and safest way to detonate explosives. It allows for millisecond delays between multiple shots, thereby reducing the peak noise level and debris thrown by the explosion.

Proper loading is using the correct type of explosives for the site characteristics (e.g. type of rock, depth of culvert) without overloading with too much explosives - creating more noise.

Stemming of the holes refers to placing the explosives in a hole or culvert and then filling the hole or culvert with dirt or sandbags. This allows for a more effective denotation with less explosives and less noise because the energy of the shot is absorbed by the dirt or sandbags and not transferred directly to the air.

noise possible while accomplishing the objective. Specific measures include:

- Explosives will not be used between two hours before sunset and two hours after sunrise.
- Limit the use of surface shots. Confine shots to augered holes, where feasible.
- Use the nonel system whenever possible. The nonel system is a non-electronic system, which is the most versatile and safest way to detonate explosives. The advantage from a noise perspective is that it allows for millisecond delays between multiple shots, thereby reducing the peak noise level and debris thrown by the explosion.
- All holes will be individually primed with a nonel cap.
- Ensure the proper loading and stemming of augered holes. Proper loading means that the correct type of explosives for the site characteristics (e.g. type of rock, depth of culvert) will be used without overloading with too much explosives and creating more noise. Stemming of the hole refers to placing the explosives in a hole or culvert and then filling in the hole or culvert with dirt or sandbags. It allows for more effective denotations with less explosives and less noise because the energy of the shot is absorbed by the dirt or sandbags and not transferred directly to the air.
- For sites requiring multiple shots, utilize the nonel system to detonate the shots with millisecond delays.

Wildlife Habitat Security Measures – Equipment, including explosives, needed for project activities on currently impassible roads will be packed in by project personnel or pack animals, wherever feasible, to reduce or eliminate the need for helicopter flights or motorized vehicle transportation of equipment..

Helicopter Use – The use of helicopters will be kept to a minimum and will only be used for tasks requiring their use or when their use poses a lower level of disturbance to wildlife than alternative methods of accomplishing the same task, such as opening up a currently undrivable road to motorized use. For example, whenever possible, multiple culverts will be flown out simultaneously to reduce the number of trips and all helicopter flights within each subdrainage will be conducted over as short a time period as possible. Whenever possible, helicopters will remain a minimum of 500 meters above ground level and follow a flight path that stays directly above open or restricted roads, in that order. All helicopter landings should be placed along open roads. Bears observed from helicopters will not be approached and the flight path will be altered to either gain an altitude of at least 500 meters above ground level or go around the bear by at least a half a mile. In order to reduce or eliminate disturbance to grizzly bears during the den emergence period, there will be no helicopter flights for project purposes from April 1 to May 15.

Grizzly Bear Protection – Project activities within the Scotchman BMU (Bear Management Unit) and North Lightning BMU will be designed to reduce or eliminate the impact of activities on grizzly bears.

- No project activities will occur in core habitat within spring habitat in the Scotchman or North Lightning BMUs during the spring bear season, April 1 to June 15.
- Project activities requiring the use of motorized equipment (e.g., excavators, chainsaws, helicopters) or explosives within core habitat will only take place in one subwatershed per year and will move systematically throughout the Lightning Creek watershed.
- The following chart represents a likely scenario on the timing of how project activities will be implemented:

Year of Project	Subdrainage (6th code HUC)	Activities within Core Habitat?	Roads/Trails with Ground Disturbance Activities
1	- Lightning Creek below East Fork Creek - Middle Lightning Creek - Lightning Creek above Rattle Creek	No	419, 419B, 642
1	- Middle Lightning Creek (Porcupine Creek)	Partially	642, 2759, 399, Section 26 Roads
2	- Middle Lightning Creek (Rattle Creek)	Partially	473, 473A, 473UA, 473UB, Section 36 Roads
3	- East Fork Creek	Partially	1030, 1184, Trail 61, Trail 212
4	- Middle Lightning Creek (Wellington Creek)	Partially	1006, 1016, 1053
5	- Middle Lightning Creek (Mud Creek)	Partially	340
5	- Middle Lightning Creek	No	1054A, 1054B
6	- Lightning Creek above Rattle Creek	Partially	1022A, 1091A, 1091UB, 419A, 419H

Food and Garbage Storage - The Grizzly Bear Management Protection Plan (see Wildlife Specialist Report, Attachment A) will be included in all contracts and will be adhered to by all Forest Service employees, contractors, and subcontractors.

Gray Wolf Protection – To limit disturbance to wolves during denning, there will be no project activities within one mile of an active den site or rendezvous site between April 15 and June 30.

Measures Designed to Reduce the Spread of Noxious Weeds

- Noxious weed treatment will be conducted according to guidelines and priorities established in the Sandpoint Noxious Weed Control Project FEIS. Methods of control may include biological, chemical, mechanical and cultural. Follow-up treatments and monitoring will be conducted as needed.
- Gravel or borrow pits to be used during road construction or reconstruction will be free of new weed invader species (as defined by the IPNF Weed Specialist). A list of weed species considered potential new invaders is included in the project file.
- Any priority weed species (as defined by the IPNF Weed Specialist) identified during road maintenance will be reported to the District Weed Specialist. A list of priority weed species is included in the project file.
- Cleaning of off-road equipment will be required prior to entry onto National Forest lands. If operations occur in areas infested with new invaders (as defined by the IPNF Weed Specialist), all equipment will be cleaned prior to leaving the site.
- All new (relocated) road segments, reconstructed roads, new trailheads and new parking areas will be seeded with a weed-free native and desired non-native seed mix and fertilized as necessary.
- All straw or hay used for mulching or watershed restoration activities will be certified weed-free.
- Road segments identified for weed treatment and proposed for decommissioning will be treated prior to decommissioning.

Measures Designed to Protect Heritage and Cultural Resources

No cultural resources will be affected by this project. In the event that heritage resources are encountered during road reconstruction or decommissioning activities, the Idaho Panhandle National Forests has the authority to modify or stop road work. The contractor will notify the Idaho Panhandle National Forests engineering representative regarding such discoveries. Mitigation of impacts can include but are not limited to:

- Establishing buffer zones
- Directional falling of trees removed in work zones
- Changing road locations
- Designating trails away from historic properties
- Allowing only seasonal activities
- Locating slash disposal activities away from discovered sites

Monitoring

Aquatics

- Monitoring of project implementation and watershed resources will take place during and after project completion. Best Management Practices (BMPs) will be incorporated into many different phases of the project. The Zone Hydrologist and/or an engineering representative will review the planned design of all road work and monitor implementation of activities to assure compliance with BMPs. Following the completion decommissioning, roads will be checked periodically by district personnel during the first year (and periodically thereafter if no problems are noted) to monitor effectiveness of erosion control, noxious weed control, and wildlife security.
- Because the implementation of the entire project is likely to take at least six years, repeat surveys of specific stream sections for monitoring purposes are likely to occur even before all work items are complete. This monitoring will continue following the full implementation of the project. Continued monitoring of bull trout spawning will be carried out by Idaho Fish and Game on an annual basis. Biological inventories will occasionally be supplemented by U.S. Forest Service fish presence and abundance surveys.
- Bank conditions will be monitored annually by a recreation specialist, engineer, roads/trails manager, hydrologist, or fisheries biologist to see if access across the creek in this area is causing any accelerated resource degradation. Although the navigation route across the cobble and creek may change from year to year depending on changes in river morphology, the approaches over the stream bank to the ford should be located in same place every year. If it is found that access in these areas is causing resource damage, measures such as armoring the approaches will be used to mitigate potential effects to local resources. An optical inventory of stream bank and channel conditions will be made of the area surrounding the approach to determine if motorized recreationists are accessing undesignated areas. Resource restoration/mitigation and access management measures would be implemented as necessary.
- In-stream channel morphology and fish habitat conditions will also be monitored annually by a fisheries biologist, or hydrologist to determine if changes in local habitat conditions may increase the risk of harassment or injury to native fish by ATV use of the ford across Lightning Creek. Currently, this part of Lightning Creek is used primarily as a migration corridor by fish. Substrate size and arrangement in the area of the ford is not currently conducive to spawning and is not critical to the maintenance of other life-cycle requirements for fish species. If conditions change and it is determined that there is an increased risk to fish through use of the

ford, a designated route will be established to avoid impacting fish habitat, or access will be limited until habitat conditions change and there is a reduced risk to fish.

Noxious Weeds

- Pretreatment of roads and equipment as proposed (see Features Common to All Action Alternatives) will be documented on contract inspection reports. The effectiveness of seeding disturbed areas will be evaluated upon completion of the activity. Treated areas will be surveyed and monitored according to treatment priorities established in the Sandpoint Noxious

TES Plants

- Monitoring of rare plant populations where the proposed activity was modified by buffering to avoid adverse effects will be conducted to validate the effectiveness of mitigation measures during and following the activity.

Recreation

- Porcupine Lake campground will be monitored for use. If monitoring shows that the lake is constantly exceeding high use levels, restrictions limiting the number of visitors may be implemented.

Appendix B – Lightning Creek Restoration Project Environmental Assessment Errata and Addendum

Errata

The following were errors discovered after the Lightning Creek Restoration Project EA was published:

EA, page 16 under Motorized Trail Converted to Nonmotorized Trail (Lake Darling Trail 52) under Alternative 4 Proposed Action Modified for Option B should be replaced with 2.1.

EA, page 47 second sentence under Effects Common to Alternatives 1 and 3 should be replaced with: With the motorized use of Lake Darling trail, the semiprimmitive *nonmotorized* recreation opportunity setting of Lake Darling and the surround area is compromised.

EA, Maps 3-6: Trail 134T from the junction of 559T and road 473A should have been removed from the map, this was a mapping error. This section of trail 134T will be removed from the system and abandoned.

Addendum

Trail Changes

Public comment pointed out information about trail segments that could be removed from the district trail system because they don't provide access to other trails or they dead end. The interdisciplinary team reviewed these segments and made the following changes:

Trail 1030 - The southern portion of trail 1030 from the junction of trail 60T heading south will be decommissioned by scarifying/seeding, removal of culverts (if present), and removing from the system.

Trail 61T - The roadbed will be decommissioned and trail 61T will be abandoned beyond the junction of 563T.

Trail 114T - The trailhead for this trail will be armored with boulders to discourage motorized access.

Lightning Creek Ford to Porcupine

Based on public comment concerning the ford on Lightning Creek accessing Porcupine road #642 and its effects to sedimentation and bull trout the following monitoring has been added:

Bank conditions will be monitored annually by a recreation specialist, engineer, roads/trails manager, hydrologist, or fisheries biologist to see if access across the creek in this area is causing any accelerated resource degradation. Although the navigation route across the cobble and creek may change from year to year depending on changes in river morphology, the approaches over the stream bank to the ford should be located in same place every year. If it is found that access in these areas is causing resource damage, measures such as armoring the approaches will be used to mitigate potential effects to local resources. An optical inventory of stream bank and channel conditions will be made of the area surrounding the approach to determine if

motorized recreationists are accessing undesignated areas. Resource restoration/mitigation and access management measures would be implemented as necessary.

In-stream channel morphology and fish habitat conditions will also be monitored annually by a fisheries biologist, or hydrologist to determine if changes in local habitat conditions may increase the risk of harassment or injury to native fish by ATV use of the ford across Lightning Creek. Currently, this part of Lightning Creek is used primarily as a migration corridor by fish. Substrate size and arrangement in the area of the ford is not currently conducive to spawning and is not critical to the maintenance of other life-cycle requirements for fish species. If conditions change and it is determined that there is an increased risk to fish through use of the ford, a designated route will be established to avoid impacting fish habitat, or access will be limited until habitat conditions change and there is a reduced risk to fish.

Further explanation of need for access to NRCS SNOTEL site

Public comments indicated confusion on the proposed changes for NRCS access to their monitoring site. As described in the environmental assessment on pages 12 and 13, the Natural Resource Conservation Service (NRCS) has a permit with the Forest Service to operate and maintain a snow and climate monitoring station south of Rattle Creek road near the Montana border. Access by NRCS to this site has been via OHV on an old road segment off the Rattle Creek road below Clatter Creek. Under the selected alternative, the road where NRCS has accessed the site will be converted to a nonmotorized trail, preventing motorized use to the monitoring site. What was not mentioned in the EA is that motorized access is necessary to transport heavy equipment and fuel to the monitoring site. Therefore, a new access trail will be constructed to continue to provide motorized access, which is on the edge of the Scotchman Peaks roadless area and adjacent to an area that has been open to motorized access for decades. NRCS access would only be needed two times per year to transport equipment and supplies. This trail will be between 700 and 1,200 feet in length with a 60-inch-wide tread to accommodate permitted OHV use. A gate and sign at the junction of this new trail will be installed to allow administrative use only.

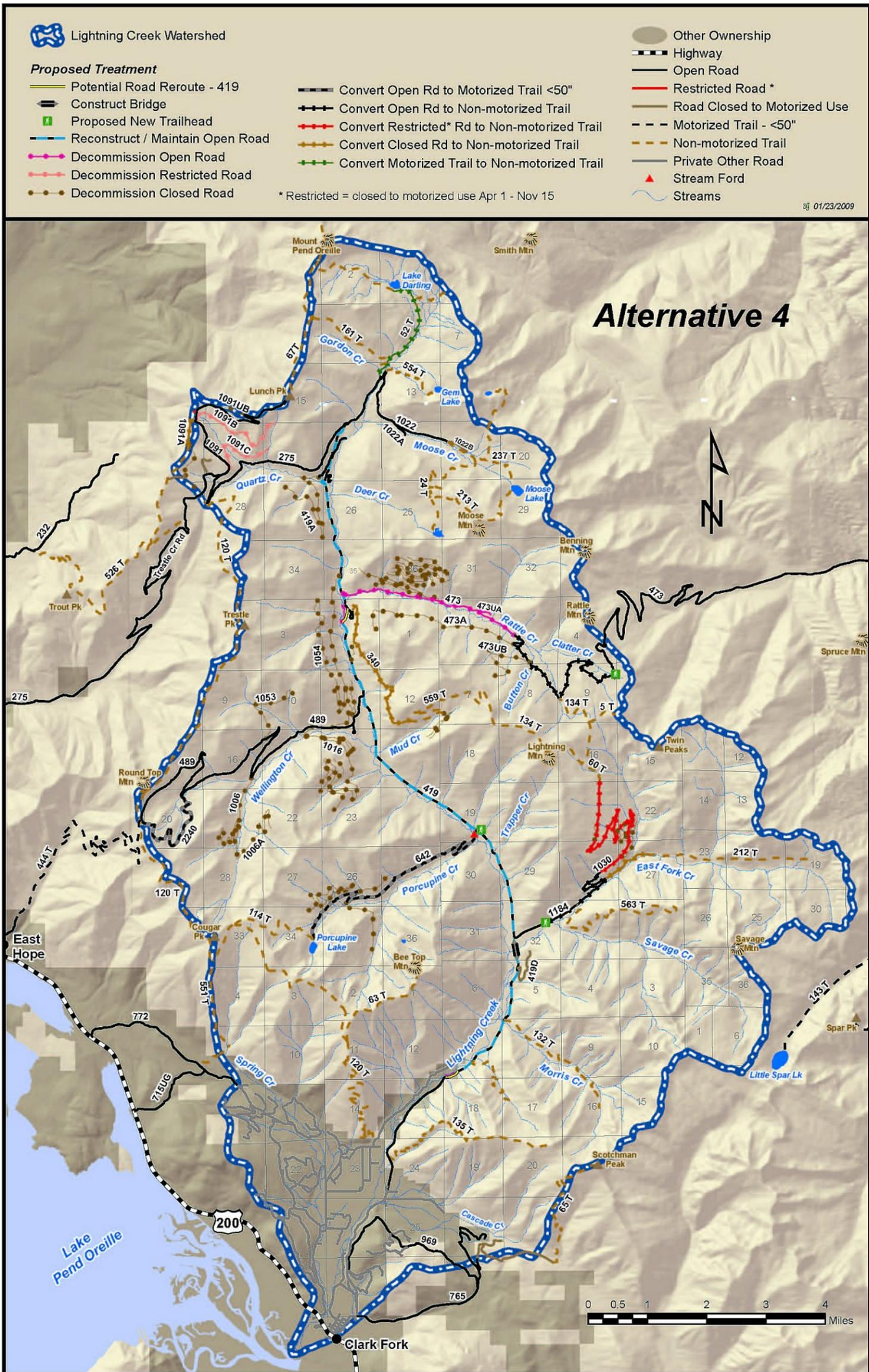


Figure 1. Map showing actions that will occur in the selected alternative, Alternative 4 (option A)

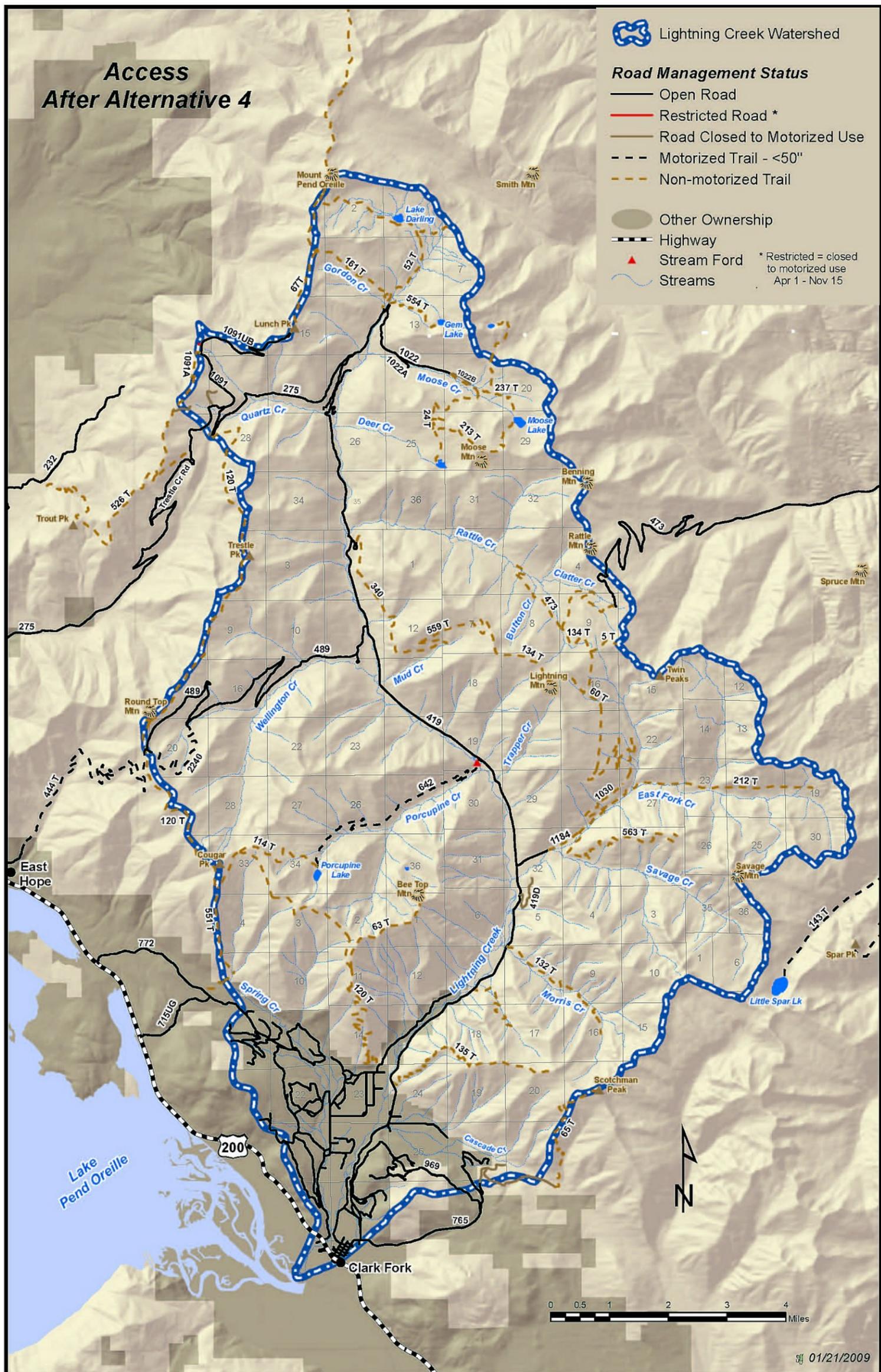


Figure 2. Map showing types of access after implementation of the selected alternative (Alternative 4, option A)