

FHWA-ID-EIS-04-1-F

Fernan Lake Road Safety Improvement Project

ID PFH 80

Record of Decision



August 2005

Kootenai County, Idaho



United States Department of Transportation
Federal Highway Administration
Western Federal Lands Highway Division

FWHA-ID-EIS-04-1-F

Fernan Lake Road Safety Improvement Project
Idaho Forest Highway 80 (ID PFH 80)
MP 0.0 to MP 10.7
Kootenai County, Idaho

RECORD OF DECISION

Submitted Pursuant to 42 U.S.C. 4332 (2) (c)
(and where applicable, 49 U.S.C. 303) by the
U.S. Department of Transportation
Federal Highway Administration
Western Federal Lands Highway Division

Cooperating Agency

U.S. Forest Service

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Going Metric

In accordance with recent executive orders and direction from the U.S. Secretary of Commerce, project plans of the Federal Highway Administration and supporting agencies are to be converted to metric units. This memorandum gives measures in both metric and English units. Here is a brief summary of units used in the FEIS and how they can be converted.

Measure	Metric	Multiply by	English
Area	hectare (ha)	2.4710	acre (ac)
	square kilometer (km ²)	0.3861	square mile (mi ²)
	square meter (m ²)	10.7639	square foot (ft ²)
Concentration	microgram/liter (ug/l)	1	parts per billion (ppb) approx
	milligram/liter (mg/l)	1	parts per million (ppm) approx
Distance	centimeter (cm)	0.3937	inch (in)
	meter (m)	3.2808	foot (ft)
	kilometer (km)	0.6214	mile (m)
Speed	kilometers per hour (km/h)	0.6214	miles per hour (mph)
Volume	cubic meter (m ³)	1.3080	cubic yard (yd ³)

Abbreviations and Acronyms

4(f)	Section 4(f) of US Department of Transportation Act (1966)	ISHDM	Interactive Highway Safety Design Model
ACHP	Advisory Council on Historic Properties	ITD	Idaho Transportation Department
ATV	all terrain vehicle	LWD	large woody debris
BA	biological assessment	MIS	management indicator species (FS)
BMP	best management practice	MOA	memorandum of agreement
CCC	Civilian Conservation Corps	MP	mile post
COE	US Army Corps of Engineers	NEPA	National Environmental Policy Act
CWA	Clean Water Act	NFS	National Forest System
DEA	David Evans and Associates, Inc.	NRCS	USDA Natural Resources Conservation Service
DEIS	draft environmental impact statement	NRHP	National Register of Historic Places
EIS	environmental impact statement	PS&E	plans specifications and estimates
EPA	US Environmental Protection Agency	ROD	record of decision
ESA	Endangered Species Act	ROW	right of way
ESHD	East Side Highway District	SEE	Social, Economic, Environmental (team)
FEIS	final environmental impact statement	SHPO	State Historic Preservation Office
FEMA	USDHS Federal Emergency Management Agency	SWPPP	storm water pollution prevention plan
FHP	Forest Highway Program	T&E	threatened and endangered (species)
FHWA	Federal Highway Administration	USGS	USDI Geological Survey
FLR	Fernan Lake Road (ID FHP 80)	WFLHD	Western Federal Lands Highway Division
FS	USDA Forest Service	WPA	Works Progress Administration
FWS	USDI Fish and Wildlife Service		
I-90	Interstate 90		
IDEQ	Idaho Department of Environmental Quality		
IDFG	Idaho Department of Fish and Game		
IDL	Idaho Department of Lands		
IDPR	Idaho Department of Parks and Recreation		
IDWR	Idaho Department of Water Resources		
IPNF	Idaho Panhandle National Forests		

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This Record of Decision is available for review at <http://www.wfl.fhwa.dot.gov/projects/fernan/> and at the following locations:

Idaho Panhandle National Forests
Supervisor's Office
2502 Sherman Ave.
Coeur d'Alene, ID 83814

Idaho Panhandle National Forests
Coeur d'Alene River Ranger District
2502 East Sherman Avenue
Coeur d'Alene, ID 83814

Federal Highway Administration
Western Federal Lands Highway Div.
610 East Fifth Street
Vancouver, WA 98661

East Side Highway District
6095 E. Mullen Trail Road
Coeur d'Alene, ID 83814

Kootenai County Planning Department
451 Government Way
Coeur d'Alene, ID 83814

FHWA – Idaho Division
3050 Lakeharbor Lane, Suite 126
Boise ID 83703

Idaho Transportation Department
600 W. Prairie Ave.
Coeur d'Alene, ID 83815

City of Coeur d'Alene Planning Dept.
710 Mullan Ave
Coeur d'Alene, ID 83814

Coeur d'Alene Public Library
201 East Harrison Ave.
Coeur d'Alene, ID 83814

Spokane Public Library
906 W. Main
Spokane, WA 99201

RECORD OF DECISION

The Federal Highway Administration, Western Federal Lands Highway Division (FHWA) prepared this Record of Decision (ROD) for Fernan Lake Road Safety Improvement Project in Kootenai County, Idaho. Partner agencies and participants on the FHWA's Social, Economic, and Environmental (SEE) team are Idaho Panhandle National Forests (IPNF), Idaho Transportation Department (ITD), and East Side Highway District (ESHD).

This ROD complies with the National Environmental Policy Act (NEPA), regulations implementing NEPA (40 CFR 1505.2), and related FHWA procedures (23 CFR 771). It is a statement of the decisions made as a result of environmental and socioeconomic analysis, and consideration of input from the public and other agencies. The Final Environmental Impact Statement (FHWA-ID-EIS-04-1-F) summarizes the analysis and input.

This document provides the basis for the decision. It describes the project background, the selected alternative and the reasons for its selection, other alternatives considered but not selected, measures to minimize harm, and public and interagency involvement. It concludes with the Section 4(f) finding and the ROD approval. Appended are comments received on the FEIS, the Memorandum of Agreement between FHWA and Idaho State Historic Preservation Office, and U.S. Fish and Wildlife Service concurrence with the Biological Assessment for the project.

1.0 PROJECT BACKGROUND

Idaho Forest Highway 80 (ID PFH 80), commonly known as Fernan Lake Road, is a two-lane paved road between the City of Coeur d'Alene and Fernan Saddle, a geographic feature in the IPNF in Kootenai County (Figure 1). Fernan Lake Road is the most

heavily used road on the Coeur d'Alene River Ranger District of the IPNF. ITD records show it has a much higher accident rate than similar roads statewide. ESHD reports it has the poorest conditions of all the roads it maintains. The road was constructed in the 1930s and has been improved over the years, but lacks stormwater treatment to protect the water quality of Fernan Lake and Creek.

FHWA and the partner agencies propose to reconstruct or resurface 17.2 km (10.7 mi) of Fernan Lake Road. The road is divided into three segments for this project:

- Segment 1, MP 0.0 to MP 2.2, mostly along the north shore of Fernan Lake;
- Segment 2, MP 2.2 to MP 5.0, along the west side of lower Fernan Creek;
- Segment 3, MP 5.0 to MP 10.7, entirely in IPNF along steep upper Fernan Creek.

1.1 PURPOSE AND OBJECTIVES

The overall purpose of the project is to improve, reasonably and cost effectively, the safety of Fernan Lake Road, while minimizing adverse impacts to sensitive environmental resources. The three primary reasons to construct one of the build alternatives are:

- To maintain an efficient transportation link between the City of Coeur d'Alene and IPNF at Fernan Saddle that safely accommodates traffic projected through 2026.
- To upgrade stormwater treatment along Fernan Lake Road to protect water quality in Fernan Creek and Fernan Lake.
- To provide a roadway that can be reasonably maintained in a sustainable manner by ESHD.

Project objectives were determined based on the needs identified for the project. Alternatives must meet these objectives reasonably and cost effectively.

Transportation Objectives

1. Improve access to the IPNF from the Coeur d'Alene area.
2. Improve the safety for current and future travelers, including bicyclists, by providing a consistent roadway geometry and safety features such as guardrail, signs, and striping to alert motorists to potential hazards.
3. Provide a roadway width and surface capable of safely accommodating existing and projected 2026 traffic.

Maintenance Objectives

1. Provide roadway improvements that reduce road maintenance costs.
2. Repair existing roadway deficiencies (soft subgrades, inadequate drainage, degrading cut slopes, etc.) to reduce maintenance frequency and cost.

Environmental Objectives

1. Repair unstable side slopes to reduce sedimentation of streams and the lake and allow revegetation.
2. Avoid, minimize or mitigate long-term adverse impacts of the road to the environment. Protect sensitive species and habitats. Minimize short-term adverse impacts from road improvements.
3. Correct roadway drainage problems and protect the water quality of Fernan Lake and Fernan Creek.

Land Use and Recreation Objectives

1. Provide off-road parking for recreational users to enhance their safety.
2. Improve recreational lake access and protect the area from harm as a result of recreational use.
3. Minimize right-of-way acquisition, particularly through private land.
4. Comply with applicable guidelines from the IPNF Forest Plan and Kootenai County plans and ordinances.

1.2 MAJOR ISSUES

FHWA held several meetings with the public, partner agencies, and regulatory and resource agencies to identify the issues and concerns associated with the proposed project. Major issues identified by the public and agencies include:

1. Changes in safety and traffic operations, especially in Segment 1 where most accidents have occurred.
2. Changes in water quality of Fernan Lake.
3. Encroachment of road features into Fernan Lake.
4. Potential for landslides related to construction on steep slopes, including changes in sediment loading to Fernan Lake.
5. Changes in recreation access and scenic qualities along the road corridor.
6. Changes in cultural resources along the road that are eligible for listing in the National Register of Historic Places.
7. Changes in wetland amount, function, and value.
8. Changes in fish and wildlife habitat and populations, particularly those listed under the Endangered Species Act.
9. Changes in traffic volumes, development patterns, and right-of-way (ROW) requirements related to the proposed road improvements.

Many issues are reflected in the project objectives.

2.0 SELECTION OF ALTERNATIVE G

FHWA selects Alternative G for implementation because it is the alternative that best, among relative equals, meets the safety needs of the project, while meeting the remaining project purposes and objectives. Under the Interactive Highway Safety Design Model (IHSDM), Alternative G projected the fewest accidents in the year 2026, decreasing the expected fatality and injury accidents to less than half of that predicted for the existing roadway (2.0 vs. 5.3 accidents per year) and decreasing the personal property accidents from 11 to 4.2 per year. This constitutes an overall 62% improvement to safety.

Alternative G also is the environmentally preferred alternative that meets the project purpose and objectives. Reasons why Alternative G is environmentally preferred include, but are not limited to:

- It most closely follows the existing road, thus avoiding extensive in-water construction across the mouth of Lilypad Bay required for Alternative E, and avoiding over one mile of new ground disturbance with extensive hillslope cuts and fills required for Alternative Fm.
- Construction of the new curved bridge across the upper end of Lilypad Bay for Alternative G will occur behind the existing causeway, thus protecting the lake from related short-term impacts to water quality.
- Alternative G has fewer visual impacts than the other two build alternatives, which is important given the scenic setting of the project.
- All of the improvements in stormwater treatment, hydrologic connectivity, wildlife movements, traffic safety, roadway maintenance, and parking along the lake that are found in the other build alternatives will be provided by Alternative G.
- Along Fernan Creek, Alternative G provides the same opportunities as the other build alternatives to avoid and minimize wetland impacts, restore creek segments and enhance riparian zones near the new road, remove existing barriers to fish passage, and restore flow to the creek channel on the east side of the valley that has been deprived of flow and sediment for decades.

Factors other than environmental also support selection of Alternative G for implementation. It has the best rating among build alternatives for all non-environmental factors considered in selecting the preferred alternative in the FEIS, although it often tied with Alternative E. Alternative G has the least degree of risk or uncertainty about potential conditions that could delay or complicate final design and permitting, or that could cause interruptions during construction. Alternative E has the most risk and uncertainty (see Section 3.0).

FHWA fully considered all comments received on the FEIS (see Appendix A) before selecting Alternative G. Also considered was its unanimous choice by the partner agencies as the Preferred Alternative in the FEIS, and favorable comments on it by agencies (e.g., EPA and IDFG).

Under Alternative G, Fernan Lake Road will be rebuilt to a typical 7.4 m (25 ft) width for the first 8 km (5 mi) and rehabilitated in Segment 3. In Segment 1 the proposed alignment will remain curvilinear and essentially follows the existing alignment, mainly comprising back-to-back horizontal curves with the occasional short tangent length. Whenever possible, the horizontal alignment will be designed so that the proposed edge of pavement line will not extend past the existing edge of pavement line on the lakeside of the road. This approach minimizes the impact to Fernan Lake. Alternative G will construct a curved bridge, approximately 118 m (387 ft) long, across Lilypad Bay just north of the existing road (Figure 2). The existing fill, roadway, and the one visible culvert between MP 2.1 and MP 2.2 will be removed and rehabilitated.

Curve widening will be applied to all the curves in the alignment so that long wheel-based-vehicles will be able to drive the curves and remain more within their own lane. Installation of guardrail is proposed along some curves. An additional benefit to these widened curves is that

passenger type vehicles (cars and pickup trucks) will be able to follow a slightly larger radius through the curves.

The vertical alignment along Segment 1 will be designed so that the catch points on the right hand side of the road closely match the existing topography.

Several sections of Segment 1 may be set below the existing ground centerline in order to accommodate a slightly wider roadway surface without adversely impacting the adjacent lake and hillside.

The horizontal alignment along the valley, Segment 2, will be designed to minimize the impacts to wetlands and to minimize the amount of rock cut excavation on the west side of the roadway. Realignment of two sections of the existing intermittent Fernan Creek, which flows through a manmade ditch immediately adjacent to the roadway, will be required. These two sections are between MP 2.8 and MP 3.0, and MP 3.55 and 3.9.

3.0 OTHER ALTERNATIVES CONSIDERED

The project partner agencies, the public, and regulatory agencies identified a total of seventeen potential alternatives. Seven closely follow the alignment of the existing road, and ten would follow other roads for much or all of the route to Fernan Saddle. Most of the alternatives did not meet the needs or address all project objectives. This was true of all of the alternatives that would have improved an alternate route and four of the alternatives following the existing road. In addition to Alternative G, the FEIS analyzed the No Action Alternative and build alternatives E and Fm. A modified Alternative E was included in comments received on both the DEIS and FEIS.

The No Action Alternative was not selected because it clearly fails to meet the purpose and need for the project. Although No Action would avoid impacts of construction, there would be no improvement in safety, road maintenance, and stormwater treatment.

Alternative E was not selected, but it received many favorable comments in discussions among the partner agencies. Putting a new bridge where the original one was located would shorten the overall route and eliminate three of the curves where accidents (one fatal) have occurred. It also would provide an opportunity to create additional parking near Lilypad Bay.

Alternative E was not environmentally preferred because the extensive in-water work required to construct a 180-m (525-ft) bridge across the mouth of Lilypad Bay, for the following primary reasons:

- Bridge construction would occur in open water, instead of behind the existing road causeway. Thus, there would be more potential water quality impacts than with the other two build alternatives.
- Depth to bedrock at the bridge location exceeds 30 m (100 ft). Therefore, barge-based pile driving would be a prolonged and noisy construction activity disturbing both nearby residents and recreational users of lake.

- The new bridge would have the same alignment as the previous wooden bridge constructed in the 1940s. Construction of the new bridge could encounter creosote-treated timbers from the original bridge or suspend contaminated sediments.

Other factors support FHWA's decision not to select Alternative E. There is more uncertainty and degree of risk because 30-m (100-ft) test cores did not encounter bedrock, which is the preferred support for the long piles that will be needed. The potential to encounter hazardous materials associated with old bridge raises the possibility of a prolonged and costly interruption of construction while the site is investigated for hazardous materials, which if found could require remedial cleanup. Agencies also expressed safety concerns related to the public fishing from a bridge across open water across the mouth of Lilypad Bay.

Alternative Fm was not selected because it was not environmentally preferred and it did not meet purpose and need related to maintenance as well as the other two build alternatives. It was not environmentally preferred because:

- The substantial cut- and fill-slopes between MP 1.0 and MP 2.1 would require more ground disturbance than the other build alternatives.
- These cut- and fill-slopes would be visually conspicuous from several viewpoints.
- The elevation of the proposed road in this area would require a visually conspicuous 15.2 m (50 ft) high fill north of Lilypad Bay, which would also obstruct the lake view from at least one residence.
- The new road on the hillslope would bisect forested wildlife habitat, and represent a mortality risk to wildlife.

Another reason Alternative Fm was not selected is because it would route traffic over a hill and create new maintenance concerns for ESHD, including winter plowing and maintenance of large cut- and fill-slopes. This also is the only build alternative for which the Coeur d'Alene Tribe requested additional consultations if selected.

A modified Alternative E was recommended in comments on both the DEIS and FEIS. This modification would return abandoned roadway along Lilypad Bay north of the new bridge to the respective landowners by canceling or modifying the easements held by IPNF. These areas are designated as parking areas in the Alternative E analyzed in the DEIS and FEIS.

One variation of the modified Alternative E would separate the abandoned roadway into public parking and private driveways. The use and disposition of these areas along the bay would not cause this alternative to become the environmentally preferred alternative if the bridge is built on pilings. A bridge on pilings would still be built in open water across the mouth of Lilypad Bay. Thus the primary reasons that Alternative E was not environmentally preferred also apply to this modification.

Another variation of the modified Alternative E would substitute a floating bridge for one on pilings, making it similar to the selected Alternative G as environmentally preferred. However,

analysis by FHWA bridge engineers found a floating bridge is not reasonable or practical for the combination of heavy design loads (e.g., logging trucks), relatively short bridge length across the bay, and recorded magnitude of water level fluctuations in Fernan Lake. Also a floating bridge would still require pilings and substantial in-water work (see response 19 in Appendix A). Therefore, the primary reasons that Alternative E is not environmentally preferred, although somewhat reduced, still apply to this modification.

For these reasons, neither of the variously modified Alternative Es were selected for implementation.

4.0 MEASURES TO MINIMIZE HARM

Many elements that minimize harm were incorporated into the preliminary designs of the build alternatives. They represent part of the evolution of earlier preliminary designs with undesirable environmental effects into the alternatives fully analyzed in the FEIS.

Additional opportunities to minimize environmental impacts and improve existing conditions were identified in meetings and site visits with resource and regulatory agencies, landowners that will be affected by constructing the road improvements, and local organizations like the Fernan Lake Conservation and Recreation Association. Many of these additional measures relate to the final design process or constructing the road improvements.

Adverse effects of construction on historic Segments 1 and 2 of Fernan Lake Road will be mitigated under terms of the Memorandum of Agreement between FHWA and Idaho SHPO (Appendix B).

The Biological Assessment prepared for the project describes conservation measures to avoid adverse effects on bald eagles, a species listed as Threatened under the Endangered Species Act.

The preliminary conceptual wetland mitigation plan in FEIS Appendix E will be further developed in consultation with resource and regulatory agencies during final design. The final wetland mitigation plan will be an integral part of the CWA Section 404 permitting process (Table 1).

The preliminary revegetation plans in FEIS Appendix F also will be further developed during final design. Implementation during construction will be adjusted by a qualified botanist as appropriate for site conditions to maximize success of revegetation. Weed control measures will begin prior to construction to reduce seed banks of noxious invasive plant species.

Table 1 summarizes the environmental permits and approvals that will be required during final design and before construction.

All identified mitigation measures for adverse environmental impacts have been adopted, or in the case of unavoidable wetland impacts, remain options to consider in developing the final wetland mitigation plan during final design.

Specific measures to minimize harm, mitigate environmental impacts, and improve existing conditions are listed by discipline or resource in subsequent sections.

4.1 TRANSPORTATION

- TC-1 The contractor will be required to perform work in a manner that assures the safety and convenience of the public and protects the residents and property adjacent to the project during construction.
- TC-2 The roadway will be maintained in a safe and acceptable condition, including periods when work is not in progress. The contractor will maintain intersections with roads and residences.
- TC-3 All zoning and other local regulations apply to impacts from traffic and circulation changes. A traffic management plan will be developed for different stages of construction.
- TC-4 Signage and other means of communicating the location and duration of road closures to local residents will be required as part of the construction contract to assist road users in scheduling travel times.

4.2 WATER QUALITY

- WR-1 No construction will occur between mid-autumn and early spring when highly erosive rain-on-snow events could occur. All over-winter erosion control BMPs will be in place and effective from October 15 through April 15. Construction will be phased to reduce the extent of over-winter BMPs required.
- WR-2 All monitoring data for Fernan Lake Road stormwater runoff through existing or replaced culverts and from construction sites will be made available to water quality studies of the lake, creek, or watershed by agencies or organizations. If a bathymetric map of Fernan Lake is not produced as part of the Fernan Lake Watershed Management Plan, one should be prepared for the north shore and Lilypad Bay before construction to provide a baseline for assessing project effects on lake morphology.
- WR-3 An erosion control plan will include BMPs during construction, and new stormwater design will minimize short- and long-term sedimentation impacts on water quality. BMPs, as described in FHWA's Standard Specifications for the Construction of Roads and Bridges on Federal Highway, and in supplemental specifications, will be implemented during construction. BMPs include erosion and sedimentation control measures, pollution control measures, stormwater management measures, spill prevention control and countermeasures, and construction waste handling procedures. The BMPs described in the Federal Highway Runoff Manual that are applicable to project conditions during construction will be employed. Erosion control measures, such as the use of straw bales, silt fences, detention ponds, infiltration trenches and basins, sand filters, grassed swales, filter strips, porous pavement, and constructed wetlands will be used to prevent erosion if spoil piles are located near water features. Appropriate de-watering ponds will be provided below all spoil deposits.

- WR-4 A monitoring plan for stormwater collection and control will be prepared for IDEQ, addressing contaminants including sediment, metals, Biochemical Oxygen Demand, organic nitrogen, and total phosphorus. Materials (either temporary or permanent) resulting from the excavation will be stored outside of water features and outside the 100-year floodplain.
- WR-5 The Coeur d'Alene River Ranger District of IPNF, and IDFG will be notified prior to construction in sensitive areas (e.g., wetlands and creeks). Excavation and fill in water features will not occur when fish (westslope cutthroat trout) are spawning or eggs incubating in gravels (from April 1 to July 30).
- WR-6 At least 15 days prior to beginning pile driving, excavation, boring, and filling or any work within the ordinary high water line or the river, the contractor will submit a Spoil and Wastewater Containment Plan for approval by the IDWR, COE, and IDFG. The plan will detail how the existing road and fill will be removed from the lake and where the material will be disposed. The plan will also detail how the proposed realigned channel will be constructed and how and where wastewater from the site will be treated.
- WR-7 Work will be accomplished according to plans developed by FHWA and appropriate permits, and approved by IDFG and IDEQ. A copy of these plans will be available onsite during construction.
- WR-8 Removal of existing roadway will be accomplished so that material does not enter the water. Every effort will be made to minimize the chances of increased sedimentation to Fernan Lake and Creek. Sediment fencing will be placed between near-lake construction activities and the edge of Fernan Lake. Material will be removed from the roadway fill in Lilypad Bay, for example, in a manner that minimizes sediment production and is acceptable under appropriate regulatory permits. In-water silt curtains, booms, or other containment measures will be used around all in-water activities that disturb the lake bottom and/or shore.
- WR-9 If demolition of the existing road is to include blasting, a mitigation plan to significantly reduce or eliminate impacts to fish resources must be submitted during the design phase of the project to the U.S. Fish and Wildlife Service (FWS) and IDFG for approval prior to any blasting. The plan will include timing restrictions to avoid spawning season, measures to remove and/or scare fish from the site, micro-second timing delays in blasting, and damage assessment procedures to monitor impacts to fisheries.
- WR-10 Necessary tree removal within the ROW and subsequent hauling will not occur during the wet season. Log landing areas will be sited away from creeks and streamside management units, and receive adequate erosion control. Sites will be approved by the IPNF.
- WR-11 Improved stormwater management will be implemented. Stormwater drainage ditches will be located along all cut-slope locations on the north side of the road and on both

sides of the road where topography permits. Dependent on getting a maintenance agreement with the appropriate party, numerous small stormwater detention-ponding basins will be located adjacent to the road (upslope side) to allow road runoff to settle before entering stream channels or the lake. Stormwater ditches will be provided on the south side of the road where possible. Where such placement was not possible, runoff from the road will sheet flow across a vegetated water quality filter to the lake or stream.

- WR-12 To avert slumping possibilities, road drainage will not be concentrated in unstable areas.
- WR-13 Wastewater from project activities and water removed from within the work area during construction will be routed to stormwater detention ponds to allow sufficient removal of fine sediment and other contaminants and to meet Kootenai County Stormwater Standards prior to being discharged to stream channels or the lake.
- WR-14 The new bridge upstream of the existing roadway and fill will be built before the existing road is removed so that the existing road will trap most of the sediment created during construction.
- WR-15 The proposed bridge and culverts will be designed to pass the 100-year peak flow requirement and to take into account the debris likely to be encountered. Abutments, piers, pilings, sills, approach fills, etc., will not constrict flow or cause any appreciable increase (not to exceed 6 cm [0.2 ft]) in backwater elevation (calculated at the 100-year flood) or channel-wide scour, and will be aligned to cause the least effect on water features.
- WR-16 Where aggregate or earth-type material is used for paving or accumulates on the bridge, curbs will be installed and maintained to prevent the loss of this material into the water features. Bridge approach material will be structurally stable and composed of material that, if carried into the water, will not be detrimental to fish. Where possible, rock and large woody debris (timber) from road widening will be used to construct in-stream improvements.
- WR-17 Concrete structures will be sufficiently cured prior to contact with water to avoid leaching. Fresh concrete will not be allowed to come into contact with surface waters.
- WR-18 Where culverts are to be replaced, work will be limited to the low-flow season (summer, fall, and early winter). Exact timing is determined by water flow rather than date. In-channel work will be planned to exclude times when critical flow is exceeded. In-stream work will not occur during critical fish windows. Gabions, or other approved flow dispersion treatments, will be used directly below culvert outlets draining into water features. Planted vegetation or jute netting will be used on the side slopes on both sides of the road adjacent to culvert outlets to control erosion. Silt fences will be placed adjacent to all water bodies (riparian, wetland, lake) and during culvert replacement activities to intercept sediments during construction.

- WR-19 The potential for construction-related toxic pollution accidents will be controlled by requiring that all equipment be maintained and refueled on impervious surfaces where potential spills and stormwater runoff can be contained and kept out of the 100-year floodplain. A toxic spill response plan will be designed in order to contain any spills that occur.
- WR-20 Equipment used for this project will be free of external petroleum-based products while working around the lake. Equipment will be checked daily for leaks and any necessary repairs completed prior to commencing work activities along or above the river. No storage of fuel, petroleum-based products, or deleterious materials will be allowed on temporary work platforms over the lake. Equipment will be stationed on the existing roadway above the ordinary high water line or on the deck of a temporary or permanent bridge structure above the water but in an area where spills could be contained.
- WR-21 Water, not oil, will be used during construction to control dust. Water from the lake or municipal sources will be used to meet construction needs. Water will not be drawn from Fernan Creek.
- WR-22 Stabilization of road slopes through hydro seeding will aid control of road surface drainage. Bank sloping will be accomplished in a manner that avoids release of overburden material into the water.
- WR-23 Sidecast material, cleared vegetation and debris will be properly disposed of according to state and local agency requirements. Disposal of sidecast material will be avoided in wetlands, surface channels, and the lake, unless permitted as part of the project.
- WR-24 Where riprap materials are necessary for structure protection, angular rock will be installed to withstand the 100-year peak flow. Only clean, inert material will be allowed to contact the water. No earth fill cofferdams will be allowed.
- WR-25 Alteration or disturbance of banks and bank vegetation will be limited to that necessary to construct the project.
- WR-26 At project completion, all disturbed areas will be protected from erosion using vegetation or other means. The road banks will be revegetated with native or other approved woody and herbaceous species.
- WR-27 Because of the potential for impacts during construction, mitigation will include erosion control observation. Duties of the erosion control observer will include daily physical monitoring of all sedimentation control structures and downstream conditions within the project area. The observer, to be identified during the final design and permitting process, will assist the contractor in implementing stream and wetland mitigation plan specifications. The observer will report to the construction inspector, freeing the inspector from the monitoring duties. Erosion control measures will be implemented if work is incomplete at the end of the dry season. The observer will also be the liaison regarding fisheries issues to the county IDFG, COE, FWS and

others concerned with stream and wetland mitigation plan implementation and job performance.

- WR-28 Driveway approaches that are substantial sources of sediment delivery to the lake will be paved beyond the road ROW to complement other stormwater treatments for water quality objectives.

4.3 WETLANDS

- W-1 If rerouting of the construction ROW around the wetlands is not feasible, the top 15 cm (6 in) of soil will be removed and stockpiled prior to trenching and for no more than 5 days.
- W-2 The construction ROW will be narrowed as much as possible to minimize disturbance to wetland areas.
- W-3 Organic soils from affected wetlands will be stockpiled and used in wetland mitigation areas.
- W-4 Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts
- W-5 Rectify the impact by repairing, rehabilitating, or restoring the affected environment
- W-6 Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action
- W-7 Compensate for the impact by replacing, enhancing, or providing substitute resources or environments
- W-8 Monitor construction impacts and mitigation installation and take appropriate corrective measures
- W-9 Avoid all impacts to Wetland E. Explore opportunities to avoid impacts to Wetland A, rather than impact wetlands on both sides of the road in this location.
- W-10 Limit total wetland impacts in Segment 2 to 0.9 ha (2.2 acres). Excluding Wetland E, wetland impacts for the FEIS build alternatives range from 0.9 to 1.4 ha (2.2 to 3.4 acres), without any difference in design criteria or major differences in horizontal and vertical alignment.
- W-11 Bridge design options to lower the elevation increases needed for the bridge approaches will be explored during final design. These increases in vertical alignment seem to be primarily responsible for the extent of shoreline encroachment by riprap in Lilypad Bay.

- W-12 Remove the existing road and associated fill in Lilypad Bay, thereby restoring hydrologic connectivity and facilitating wildlife crossings.
- W-13 Complete the mitigation plan during final design, in consultation with appropriate regulatory and resource agencies.

4.4 CULTURAL RESOURCES

- HA-1 During construction, measures to protect remaining structures and minimize site disturbance adjacent to the historic site will be used.
- HA-2 If cultural materials are discovered during excavation, construction activities will halt until qualified historians and/or archaeologists have evaluated the materials and site.

4.5 FISH, WILDLIFE, AND VEGETATION

Project Design

- FWV-1 BMPs, as described in the Standard Specifications for the Construction of Roads and Bridges on Federal Highway Projects (FHWA, 1996), will be implemented during construction. BMPs include measures for erosion and sedimentation control, pollution control, stormwater management, spill prevention control and countermeasures, and construction waste handling. Each BMP applicable to project conditions will be employed.
- FWV-2 Stormwater treatment and detention will capture as much road runoff as practicable, and filter it before it enters water bodies. Stormwater will be diverted away from the lake and creek and into detention/infiltration facilities before entering water bodies. Concentration of road drainage in unstable areas will be avoided. Stormwater facilities will be designed in accordance with applicable state, county, and local agency requirements.
- FWV-3 Where the road parallels Fernan Creek and Fernan Lake, future snow storage will be away from the creek and lake. Snow removal will be done in a manner that avoids damage to resources. Snow will not be stored near creeks or where snowmelt will cause erosion. This is contingent upon agreement by ESHD when they accept the completed project.
- FWV-4 Where aggregate or earth type material is used for paving or accumulates on the road, every effort will be made to prevent deposits of material into the water bodies.
- FWV-5 Approach material will be structurally stable and composed of material that if eroded into water will not be detrimental to fish life.
- FWV-6 Stabilization of road slopes through hydro seeding and control of road surface drainage will be implemented. Bank sloping will be accomplished in a manner that avoids release of overburden material into water bodies. Overburden material from the project will be deposited so that it does not re-enter the water.

- FWV-7 Riprap materials used for structure protection in the Lilypad Bay area will be clean, angular rock, which will be installed to withstand 100-year peak flow. Fish passage structures will be constructed with rocks, as required by permit stipulations.
- FWV-8 Within one year of project completion, road banks will be revegetated with native or other approved woody and herbaceous species. Vegetative cuttings will be planted at a maximum interval of 1 m (3 ft) (on center) and maintained as necessary for three years to ensure 80 percent survival (or as specified in the COE permit or other approvals).
- FWV-9 Riparian areas will be replanted at a 1:1 ratio with in-kind plant species. A mitigation-monitoring plan will be developed for COE approval. Monitoring parameters may include water quality, fish habitat, riparian vegetation, and bank stability conditions in the creek after project completion for three years or as stipulated in the COE permit.

Construction

- FWV-10 Side casting of old asphalt will not be permitted. Old roadbed materials will either be recycled onsite or removed to a suitable disposal area. Removal of the existing roadway will be accomplished so that structure and associated material does not re-enter water bodies.
- FWV-11 Vegetation clearing (including selected tree removal within the ROW) and subsequent hauling will not occur during the wet season, if possible, and will be completed prior to May 1 (prior to bird nesting season).
- FWV-12 If possible, some of the trees removed from the ROW during construction will be placed in the edge of the lake to add structure to the shallow water habitat.
- FWV-13 Only clean, inert material will be allowed to contact water bodies. No earth fill cofferdams will be allowed.
- FWV-14 Alteration or disturbance of banks and bank vegetation will be limited to the minimum necessary to construct the project. Within seven calendar days of project completion, all disturbed areas will be protected from erosion using vegetation or other means.
- FWV-15 Spoil piles from excavation will be stored outside the 100-year floodplain, not within water features, or hauled to an approved site. Appropriate de-watering ponds will be provided below all spoil deposits.
- FWV-16 Excavation and fill in the lake and creek channel will not occur when fish such as westslope cutthroat trout are spawning or when eggs are incubating in gravels (from April 1 to July 30) if such activities could potentially impact spawning areas.
- FWV-17 When practicable, surface-to-bottom in-water silt curtains will be used around all in-water sediment disturbance activities, as stipulated by IDL and other permits. Silt fences will be placed adjacent to all water features (riparian, wetland, and lake) during culvert replacement activities to intercept sediments during construction.

- FWV-18 When practicable, gabions will be used directly below culvert outlets draining into perennial streams, creeks, and lakes.
- FWV-19 When conditions allow, planted vegetation or jute netting will be used on side slopes adjacent to culvert outlets to control erosion.
- FWV-20 The Coeur d'Alene River Ranger District and the IDFG will be notified prior to construction in sensitive areas such as creeks, wetlands, and lakes.
- FWV-21 A blasting plan will be submitted to appropriate agencies for approval prior to any blasting activities. The plan will address any tactics needed to remove and/or scare fish from the site, microsecond timing delays in blasting, and damage assessment procedures.
- FWV-22 The possibility of toxic pollution will be controlled by requiring that, when practicable, all equipment be maintained and refueled on impervious surfaces out of the 100-year floodplain, so as to contain potential spills and stormwater runoff. A Spill Prevention Control and Countermeasures Plan (SPCC) will be developed, approved, and implemented to contain any spills that occur.
- FWV-23 The contractor will implement all stipulations and conditions contained in the permits acquired by FHWA.
- FWV-24 Equipment used for this project will be free of external petroleum-based products while working around the lake or creek. Equipment will be checked daily for leaks and necessary repairs will be completed prior to commencing work activities along or above water bodies. No fuel, petroleum-based products, or deleterious materials will be stored on temporary work platforms over the lake or creek.
- FWV-25 Municipal water will be used during construction to control dust. Oil will not be used. Water from Fernan Lake, but not from Fernan Creek, could be used to meet construction needs if municipal water is not available.
- FWV-26 A Stormwater Pollution Prevention Plan (SWPPP) will be part of the permit applications (IDEQ, IDL, IDFG, etc.). The SWPPP will include a provision for monitoring during construction.
- FWV-27 Heavy equipment will not be operated outside construction limits in areas with soil moisture limitations.
- FWV-28 Erosion control observation will occur on a weekly or daily basis during construction, depending on precipitation. The observer will be responsible for monitoring all temporary and sedimentation control structures and downstream conditions in the project area. Erosion control measures will be implemented if work is incomplete at the end of the dry season. The FHWA construction engineer will also be a liaison

between the project and the county, IDFG, COE, FWS, and other agencies for issues related to fisheries, stream and wetland mitigation.

- FWV-29 Where the one visible existing culvert is to be removed and the proposed bridge constructed (between MP 2.0 and MP 2.1), work will be limited as much as possible to the low-flow season.
- FWV-30 Wastewater from project activities and water that may be removed from the work area during construction will be detained to allow removal of fine sediment and other contaminants and to meet Kootenai County Stormwater Standards, prior to being discharged to state waters.
- FWV-31 Extra precautions will be taken for equipment operation around water features to prevent contamination.
- FWV-32 Structures containing concrete will be sufficiently cured prior to contact with water to avoid leaching. Measures will be used to prevent fresh concrete from coming into contact with state waters.
- FWV-33 Temporary, approved toilet facilities will be provided onsite for construction personnel during construction. The temporary toilets will be located away from the lake and creek.

Bridge construction

- FWV-34 The new bridge will be built before the existing road is removed, allowing the existing road to trap most of the sediment created during bridge construction.
- FWV-35 The proposed bridge will be constructed so as to pass the 100-year peak flow, with a consideration of debris likely to be encountered.

Mitigation Measures to Protect Terrestrial Resources

- FWV-36 Clearing and grubbing of potential nest-bearing vegetation in the project area will not take place during the migratory bird-breeding season, which occurs from approximately May 1 to July 15.
- FWV-37 Because nesting activity for bald eagles usually occurs from January 1 to August 15, blasting and pile driving within 1.6 km (1 mi) of eagle nests will take place after August 15 or after chicks have fledged if the nest is determined to be active. A biological monitor to be determined by FHWA in conjunction with partner agencies will verify that chicks have fledged prior to construction in the area. Regular construction activities will be limited when within 0.8 km (0.5 mile) of the nest. This mitigation measure can be modified following a more detailed noise analysis and discussions with USFWS.
- FWV-38 Grass mixes specified for ditches and sideslopes will be used with browse seed mix such as elderberry, oceanspray, mountain maple, and red-stem ceanothus to enhance wildlife habitat on disturbed areas. The FS and ESHD will approve the seed mix.

- FWV-39 Temporary, approved toilet facilities will be provided onsite during construction. The temporary toilets will be located away from the lake and creek.
- FWV-40 Garbage created during construction will be collected and hauled to a proper disposal facility. Food waste will be properly disposed of.
- FWV-41 If necessary as determined by the IPNF, snags will be created where snags have been removed for safety reasons.
- FWV-42 Where big-game winter ranges overlap the project area, rock crushing, blasting, and other loud noise-generating activity that may disturb wintering big game will be timed to avoid the wintering period, if possible.
- FWV-43 Additional surveys for Threatened, Endangered, and Sensitive plant species may be needed according to FWS protocols prior to construction to ensure that no individual species are present.
- FWV-44 Meadow areas and wetlands will not be used as staging areas for tree removal or other construction-related activities.
- FWV-45 No blasting will occur west of MP 0.5 before May 1 to avoid disturbance during the egg-laying period of great blue herons that nest on the south hillside across the lake from Fernan Lake.
- FWV-46 In-water work in Lilypad Bay will not occur before July 1 to avoid disturbance during the spawning period of most warmwater fish.
- FWV-47 The new bridge across Lilypad Bay will be designed to allow wildlife crossings.
- FWV-48 All new or replaced culverts will be designed to provide fish passage if suitable stream habitat is present upstream.
- FWV-49 All new or replaced culverts that do not require vertical inlets for stormwater treatment will be designed to facilitate wildlife crossings by small species if suitable habitat is present on both sides of the road.
- FWV-50 If the vertical alignment of the road is raised between MP 3.0 and 3.5, a wildlife crossing structure will be incorporated into the final design.
- FWV-51 To prevent wildlife from falling onto the improved road, 8-ft high fences will be installed above any vertical rock cuts or retaining walls that are more than 15-ft high.
- FWV-52 Excess rock from cutslopes will be strategically placed along the improved road at locations identified by IPNF to discourage unauthorized ATV use.

4.6 LAND USE

- LV-1 Traffic management efforts will be coordinated with local residents and recreational organizations such as the Fernan Rod and Gun Club, the snowmobile and ATV clubs, and other fishing and hunting clubs, to ensure their notification prior to and during all construction activities.
- LV-2 Up-to-date information on construction schedules, anticipated delays, and locations will be supplied to emergency service providers. The contractor will be required to provide immediate passage through the construction area for all emergency service vehicles.
- LV-3 For road closures or delays longer than 30 minutes, public notice will be given in advance through the local news media and by information signs. Road closures of up to 4 hours might be needed during construction along the lake.
- LV-4 The contractor will use only approved portions of the ROW for storing material and placing equipment and will not use private property for storage without written permission of the property owner.
- LV-5 Construction will be phased over two or more years. At the end of the construction season, all exposed ground will be covered or planted to protect it from erosion during winter.

4.7 VISUAL/SCENIC

- V/S-1 *Road cut slopes.* Adjust final alignment to minimize road cut and fill slopes and retaining walls as much as possible while maintaining safe travel design parameters. Retain existing vegetation between the road and the lake wherever possible. Revegetate with native materials and grass mix compounded specifically for this area as necessary to blend into surroundings. Treat and grade slopes to allow optimum revegetation.
- V/S-2 *Rock outcrops in road cut slopes.* Stable rock outcrops will be retained where possible. Allow for a natural, broken-faced effect on new cuts, where consistent with geotechnical conditions.
- V/S-3 *Existing roadbed areas to be abandoned.* Minimize compaction by ripping and scarifying. Blend the roadway into contours of surrounding terrain as far as possible consistent with safety. Using native materials, revegetate disturbed areas to blend roadway into surroundings.
- V/S-4 *Guardrails.* Select guardrail materials that complement or blend into the surroundings by utilizing timber or “self-weathering steel” or similar treatment. Consider the use of wire guardrails rather than solid rails to reduce the impact to views from the road along the lake, where consistent with safety.

- V/S-5 *Culverts.* Treat culvert ends so as to disguise them. Place rock and soil around culvert ends, or apply flat, black paint or other coatings to eliminate the shiny metallic appearance.
- V/S-6 *Retaining walls.* Construct retaining walls of materials that do not create high color or textural contrast to surroundings. Use curvilinear walls to conform with landforms where possible. Preserve existing vegetation where possible, and enhance by new plantings if necessary, to screen walls from sensitive viewer locations. Creating planting pockets in the retaining walls will break up the massive man-made appearance of larger walls.
- V/S-7 *Bridge.* Select a bridge type that is as low to the water as possible and utilize low-contrast materials and colors to construct it.
- V/S-8 *East Fernan boat dock.* Install new plantings to screen parked vehicles from the view of lake users. Preserve existing vegetation where possible.

4.8 RECREATION

Mitigation measures for land use and traffic and circulation impacts will address recreation impacts as well. Additional measures include:

- R-1 Incorporate roadside pullouts and off-road parking (one or two vehicles each) to improve safety and opportunity for shoreline access along Fernan Lake, where possible, near traditionally used locations west of MP 1.0 (see Figure 3-14).
- R-2 Expand the parking area at the Fernan fishing dock and construct a path to the dock gangway.
- R-3 Use the expanded shoreline turnout area at East Fernan launch for organized parking. Include a security light and permanent vault toilets in the final design.
- R-4 Where possible, install graded benches or riprap between Fernan Lake Road and Fernan Lake to support bank fishing and angler foot traffic, and to reduce erosion.
- R-5 Provide a parking area for winter recreational users at or near the bottom of the Fernan grade.
- R-6 Include regulatory signage to discourage undesirable activities and allow law enforcement to better regulate activities in the area. Suggested signage: No overnight camping, no campfires, no littering, parking in designated areas only, share the road with bicyclists.

4.9 SOCIAL AND ECONOMIC

Mitigation measures described for land use also apply to social and economic. There are no adverse short-term economic or environmental justice impacts. There will be beneficial short-term economic impacts.

4.10 AIR QUALITY

- AQ-1 The contractor will be required to coordinate with utilities to minimize service disruptions.
- AQ-2 All construction equipment will be required to be in good working condition. Regular inspection will ensure this.
- AQ-3 Equipment will not be idled during periods of inactivity.
- AQ-4 More energy-efficient equipment will be used where there is a choice between alternative equipment.

4.11 NOISE

Blast noise will be limited in accordance with OSHA rules and regulations. There are a number of mitigation measures typically employed by explosives engineers to reduce the noise impacts of blasts. Below are several options that may be available to be used alone or in combination, depending on the site-specific circumstances. The most important mitigation measure is N-1, the requirement for the blasting contractor to develop a comprehensive blast design plan. Acceptance of a blast plan encompassing detailed procedures and all required mitigation measures prior to blasting will ensure that residents and wildlife are protected from the impacts as much as is feasible.

- N-1 The blasting contractor will be required to develop a comprehensive blast design plan, including blast monitoring and blast documentation, with acceptance of the plan by FHWA required before any blasting occurs.
- N-2 A pre-blast survey of local residents will be performed. Both noise and vibration will be monitored during blasting.
- N-3 The blasting contractor will be required to calculate the charge size to maintain the lowest possible powder factor to accomplish the blasting goals.
- N-4 Detonation cord used on the surface will be covered with a minimum of 6 inches of fill.
- N-5 All shots will be fired in pre-drilled holes that are properly stemmed or back-filled.
- N-6 Sandbags or other fill will be placed over loaded holes.
- N-7 Blasting caps (preferably noiseless) will be required. Cap and fuse techniques will not be allowed.
- N-8 No two holes will be fired side-by-side simultaneously. Millisecond delays will be used between holes.
- N-9 Breaking or reducing boulders by the method of “plastering” or “mud-capping” will not be allowed.

4.12 HUMAN HEALTH (HAZARDOUS MATERIALS)

HZ-1 Prior to construction, the contractor will be required to prepare a Spill Prevention, Control, and Counter Measures Plan stating what actions will be taken in case of a spill or leak of hazardous materials. The plan will also incorporate preventative measures to be implemented, such as the placement of refueling facilities, storage and handling of hazardous materials, etc.

4.13 IMPLEMENTATION OF ENVIRONMENTAL COMMITMENTS

Mitigation and follow-up activities are important final steps in the environmental process to ensure that prior commitments are implemented. Thus FHWA has established procedures and training to ensure that environmental commitments in this EIS are incorporated into detailed final design and implemented during construction. Project environmental representative(s) will participate in the following tasks and activities:

- Final design kick-off meeting to review and clarify environmental commitments, agency and landowner contacts, as well as concepts and objectives in preliminary plans (e.g., mitigation, revegetation).
- Office and field reviews throughout the design phase as needed and at least semi-annually.
- Identification and recommendations to minimize impacts to critical environmental areas such as wetlands, cultural resource sites, and sensitive plant and animal habitats.
- Ongoing coordination with agencies to facilitate acquisition of permits.
- Notifications to the design team of changes in conditions since the NEPA stage, such as changes in ESA-listed Threatened and Endangered (T&E) species, new environmental regulations, or substantial changes in environmental impacts and related costs.
- Review mitigation design(s) as they progress from concept(s) to final design.
- Review formal monitoring plans that ensure the effectiveness of mitigation in eliminating or reducing impacts.
- Notify the design team of pre-construction mitigation requirements early enough in the process to allow time for completion before construction begins, but also far enough along in the process so that design details are known and impacts clearly understood.
- Explain environmental requirements to construction contractors participating in project design and review meetings.
- Review and sign-off by FHWA environmental specialist on the Plans Specifications and Estimates (PS&E) package prior to advertisement to ensure that environmental mitigation and commitments specified in the ROD or permit stipulations are included.

- Participate in preparatory discussions for pre-construction conferences.
- Review environmental monitoring data collected during construction and confirm data have been submitted to appropriate resource and regulatory agencies.
- Field review the installation of constructed environmental mitigation measures.
- Participate in post-construction follow-up, which may include activities that go beyond PS&E commitments, such as site visits, phone calls, and invitations to resource and partner agencies to participate follow-up reviews.
- Coordinate with the Division Operations Engineer to include post-construction mitigation or monitoring commitments in the project agreement(s) with the partner agency(ies).

Other FHWA measures to ensure environmental commitments that will be implemented include:

- The construction contractor's team is required to have a qualified QC Manager that is responsible for monitoring environmental compliance.
- FHWA's Inspector and the construction contractor submit daily reports that include environmental compliance, issues and concerns.
- FHWA's Project Engineer reviews the construction inspection report daily.
- All FHWA project engineers are trained each winter to remain current with new environmental regulations, environmental compliance issues, and emerging environmental issues and concerns.

5.0 PUBLIC AND INTERAGENCY INVOLVEMENT

Chapter 7 of the FEIS summarizes public and interagency involvement in the project. FEIS Appendix C contains newsletters and project updates distributed to a mailing list of approximately 500 addresses.

In addition to periodic meetings of the SEE team agencies, the Fernan project team has coordinated with regulatory and resource agencies. Many meetings were held with individual agencies. Multi-agency project meetings were held on several occasions. Frequently contacted agencies include:

Federal Agencies

Army Corps of Engineers
 Environmental Protection Agency
 Fish and Wildlife Service
 Forest Service

Idaho State Agencies

Department of Environmental Quality
Department of Fish and Game
Department of Lands, Division of Navigable Waters
Department Parks and Recreation
Department of Water Resources
State Historic Preservation Office
Transportation Department

Local Agencies

City of Coeur d'Alene
City of Fernan Lake Village
East Side Highway District
Kootenai County Parks, Recreation, and Waterways Department
Kootenai County Planning Department

Section 106 of the National Historic Preservation Act (NHPA) requires that FHWA, as lead federal agency, consult with the Advisory Council on Historic Preservation (ACHP) and the Idaho State Historic Preservation Office (SHPO) regarding effects of the project on cultural resources and historic properties. Idaho SHPO determined the all three build alternatives would have an adverse effect on Segments 1 and 2 of Fernan Lake Road, which are eligible historic properties. FHWA and Idaho SHPO negotiated a Memorandum of Agreement (Appendix B) to mitigate the adverse effects should the ROD select a build alternative.

NHPA Section 106 and federal directives on Government-to-Government Relations with Native American Tribal Governments require that federal government plans, projects, programs and activities assess tribal cultural and traditional uses in the project area and impacts on tribal trust resources. The U.S. has a unique relationship with tribal governments, which requires each federal agency to consult to the greatest extent practicable and to the extent permitted by law, with tribal governments prior to taking actions that affect federally-recognized tribal governments. FHWA has consulted with Coeur d'Alene Tribe regarding this project, and the Tribe also provided comments on the Draft EIS (Appendix D, comment 112).

Section 7 of the Endangered Species Act (ESA) requires that FHWA, as lead federal agency, consult with the U.S. Fish and Wildlife Service (FWS). As part of this consultation, FHWA prepared a Biological Assessment (BA) that describes ESA protected species in the area, effects of the Fernan Lake Road project, and conservation and mitigation measures that will be implemented. FWS concurrence with the determinations in the BA are included in Appendix C. Consultations with FWS will be re-initiated during final design if new potential for impacts are discovered, the status of ESA-listed species change, or new species that could be affected by the project are listed.

6.0 SECTION 4(f) DETERMINATION

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303 Section 4(f)) declared that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Section 4(f) properties are publicly owned parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance, and historic resources eligible for listing on the National Register of Historic Places or are locally significant. Section 4(f) specifies that:

“the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if there is no prudent and feasible alternative to using that land; and the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) “use” generally occurs when:

- Section 4(f) land is permanently acquired for a transportation facility,
- There is a temporary occupancy of Section 4(f) land that is adverse in terms of the Section 4(f) purposes,
- Section 4(f) land is not incorporated into the transportation project, but the project’s proximity impacts are so severe that the purpose for which the Section 4(f) site exists are substantially impaired. (This use is also known as “constructive use.”)

There are no public parks, recreation areas, or wildlife refuges in the project area that require Section 4(f) evaluation. Three recreational facilities managed by Kootenai County Parks and Waterways on Fernan Lake either are not publicly owned or not affected by the project. Parking areas near MP 5.0 and the project terminus at Fernan Saddle are publicly owned, but not managed as formally designated recreation areas by IPNF, and neither would be effected by the proposed build alternatives. The shooting range operated under a special use permit from IPNF is only open to members of the Fernan Rod & Gun Club and not the general public. FHWA formally coordinated with the U.S. Department of Interior, Office of Environmental Policy and Compliance, as well as state and local agencies, to confirm there are no public parks, recreation areas, or wildlife refuges that require Section 4(f) evaluation for this project.

Two historic properties that were determined eligible for listing on the NRHP occur in the project area. One is the Kelly homestead near MP 4.1, and none of the build alternatives would affect it. Segments 1 and 2 of Fernan Lake Road comprise the other one, and would be adversely affected by all build alternatives.

These segments are considered eligible for listing on NHRP because they are associated with events that made significant contribution to broad patterns of history. They retain the original narrow width and curving alignment of the road. The basic route and design of the road and its relationship to its setting along the lake and up the Fernan Creek valley remain unaltered. Stonework constructed by CCC and blasted rock walls continue to provide strong indications of the workmanship required in the construction. A strong sense of feeling and association with the New Deal era, public works projects, and CCC remains.

Alternative Routes 4, 5, 6, 7, 8, 9, and 10 discussed in the FEIS would entirely avoid Fernan Lake Road. Alternatives 4 and 5 would require substantial new road construction on ridgelines. Alternatives 7 and 8 would route logging trucks and recreational vehicles for miles along the Lake Coeur d'Alene shoreline, increasing the probability of traffic-related water pollution to this lake. All seven of these routes have substantial portions following ridgelines at higher elevations than the current road to Fernan Saddle. Thus they would either be closed when snow-covered or require frequent plowing for long distances to remain open in winter.

None of these alternatives would meet the project purpose and need related to correcting the safety, maintenance, and stormwater treatment deficiencies of Fernan Lake Road, which would need to remain open for residences and recreational facilities along the road. None of these routes could be constructed with the available funding, either because of the length of new road construction in difficult terrain, or because of the total length of roadway to improve. Thus Alternatives Routes 4, 5, 6, 7, 8, 9, and 10 would not be prudent alternatives.

Alternative Routes 1, 2, and 3 discussed in the FEIS would avoid Segment 1 but would reconstruct all or part of Segment 2. Thus they reduce adverse effects to the historic road rather than avoiding them. All three would route logging trucks and recreational vehicles through residential streets and neighborhoods, creating new safety concerns. The City of Coeur d'Alene has expressed opposition to all three routes. None of these three alternatives would improve tight curves, restricted sight distances, maintenance issues, and stormwater treatment deficiencies of the existing road along the Fernan Lake, which needs to remain open for access to residences and recreational facilities. Therefore, Alternative Routes 1, 2, and 3 would not meet the project purpose and need and would not be prudent alternatives.

FHWA has incorporated all possible planning to minimize harm to the Section 4(f) property. Under the Memorandum of Agreement signed by FHWA and Idaho SHPO (see Appendix B), FHWA will document with photographs or drawings of the culverts, retaining walls, and bridge abutments that are remaining features of the original road. FHWA will also develop an interpretive sign or display and would provide funds to support printing of a driving tour of historical locations that includes Fernan Lake Road.

Pursuant to Section 4(f) of the Department of Transportation Act, 49 U.S.C. 303, and 23 U.S.C. 138, it is hereby determined that there is no feasible and prudent alternative to the use of land from the historic segments of Fernan Lake Road. All possible planning has been undertaken to minimize harm to Section 4(f) properties.

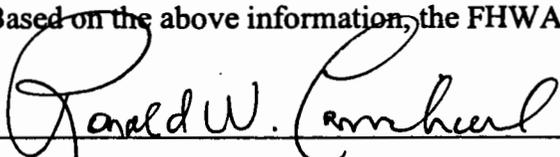
7.0 RECORD OF DECISION APPROVAL

Alternative G is selected for the Fernan Lake Road Safety Improvement Project because it is the preferred alternative and it best meets the project purpose, needs, and objectives. Alternative G offers the best overall combination of factors for improved traffic safety and road maintenance; opportunities to reduce impacts or improve existing physical, biological, and human environments; constructability; new right-of-way requirements, and reduced degree of risk or uncertainty.

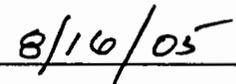
The decision to select Alternative G was made in cooperation with the partner agencies on the project SEE team. All public and agency comments received during the environmental process were reviewed and considered. The Coeur d'Alene Tribe offered no comments on or objection to this alternative in their comments on the DEIS or subsequent consultations with FHWA. Comment letters and communications on the FEIS are presented in Appendix A.

Alternative G will most effectively balance the issues and concerns in the purpose and need for the project, in information provided in the environmental impact studies summarized in the FEIS, comments received from the public, and recommendations from resource and regulatory agencies.

Based on the above information, the FHWA has selected Alternative G for implementation.



Ronald W. Carmichael, P.E.
Division Engineer
Western Federal Lands Highway Division



Date

APPENDIX A
FEIS COMMENTS AND RESPONSES

No.	Comment	Response
1	<p>As President of the Fernan Lake recreation and Conservation Association – FLRCA – a non-profit Idaho corporation, I would like to request a complete copy of the FEIS document of the Fernan Lake Safety Road Project. This copy would serve as our internal copy for review and for us to refer to as the project proceeds. Our Board of Managers would be able to refer to it and have it available for our expert consultants to use. I would also like to thank everyone involved in the Fernan Road Project for their hard work and time consideration in making sure that the lake and its surrounding environment is protected during the full scope of this progress.</p>	<p>FEIS sent. Comment noted.</p>
2	<p>I am writing in regards to the Final EIS (FEIS) for the Fernan Lake Road Project and Forest Service funding issues I had raised in my July 27, 2004 letter regarding the Draft EIS document.</p> <p>Forest Service issue: In Appendix D of the FEIS at page D-16 there is a response to comment number 123. The response stated, “A discussion has been added to the FEIS indicating that the Forest Development Road Cooperative Agreement that includes Fernan Lake Road is not a cost-share agreement that specifies funding levels or requires the Forest Service to provide federal funds.” I have been unable to locate this discussion anywhere in the FEIS copy that Coeur d’Alene Audubon received. If the discussion described on page D-16 is in the FEIS, we wish to receive information as to the Section and page number where this information is found.</p>	<p>The new paragraph added before Section 2.4 on FEIS page 2-14 was intended to conclude with a sentence describing the nature of funding for the Cooperative Agreement. Its omission was an oversight, for which FHWA apologizes.</p>
3	<p>Missing sentences – It appears that at the bottom of page 2-26 in our copy of the FEIS that sentences are missing, as there is a blank area and the top of page 2-27 starts with the word “removed”.</p>	<p>This appears to be a printing error because the text on FEIS page 2-27 is mostly redundant with that in the last three paragraphs on page 2-26</p>
4	<p>Thank you for the opportunity to review and comment on the Final EIS for the Fernan Lake Road Safety Improvement Project on Idaho Forest Highway 80 (ID PFH 80). We have been involved with the development of this project since its inception and we appreciate most of our comments and concerns being incorporated into the FEIS. We continue to support the Preferred Alternative G as the best option for a build alternative.</p>	<p>Comment noted.</p>
5	<p>In general, the FEIS does a good job of identifying appropriate measures to address habitat issues for fish and wildlife, water quality concerns, mitigation issues and recreational issues. We would like to emphasize a few points to insure that they are addressed while designing the final build plans.</p> <p>Mitigation – We agree that an erosion control plan should be developed (item 2). One of the most significant measures of the plan should be recognition of the rain-on-snow driven erosion problems this area is prone to. Item 27 addresses this issue and it should be moved to the beginning of the plan rather than be listed at the very end.</p>	<p>The order of environmental commitments in Chapter 4 of the FEIS does not imply relative importance. Instead, new commitments added in response to comments on the DEIS were added at the end of each resource listing to avoid extensive renumbering and associated edit marking that would make it difficult to detect substantive changes and additions. In the ROD WR-27 is moved to the beginning of the environmental commitments for water resources.</p>

No.	Comment	Response
6	<p>Item 8 references a mitigation plan that would avoid critical times for fish spawning. We submitted a specific list of items to address this issue, but did not see this in the FEIS. Warmwater fish will be spawning from early March through June depending on the species and the particular year, however, this does not mean that construction cannot happen. We envision that all construction activities other than actual in-water work could occur outside this window. Construction of retaining walls that extend below the water line would be best done outside the March-June window to minimize disturbance to warmwater fish.</p> <p>However, we are open to further discussion and flexibility. There are thousands of feet of shoreline and are plenty of places where fish can spawn. It may be that the particular place a retaining wall needs to be placed is not critical spawning habitat and there may be no need to delay construction.</p> <p>The following information will give you an idea of what species spawn when and where.</p> <ul style="list-style-type: none"> • Northern pike will be the first to spawn just after ice out in March and they will be utilizing the submergent vegetation in Lily Pad Bay and the inlet of Fernan Creek in the east end of the lake. • Yellow perch will be spawning from mid to late April in shallow areas along the north and east shoreline where the sun warms the water and incubates the eggs quickly. Typically the fry will hatch out within two weeks. • Spawn timing for smallmouth bass, largemouth bass, black crappie, pumpkinseed sunfish and bullheads will vary from May through June depending on the particular year and species. Cold weather and high runoff years will delay spawning due to colder water temperatures. Spawning is scattered throughout the lake, but the north shoreline where the road runs along is a preferred area due to the sun exposure it gets. <p>Brook trout are fall spawners, typically spawning in early October. The construction shutdown window being used for other activities will likely cover this concern. On a broader scale, brook trout are an introduced species that compete with native cutthroat, so we really do not want to enhance the population. However, in this specific case, brook trout are limited to the small area of Fernan Creek near the mouth and provide limited recreational fishing opportunity for anglers. From that perspective we do not want the construction activities to purposely destroy a sport fishing opportunity that exists in one specific part of the creek/lake.</p>	<p>FHWA will continue to consult with resource agencies on the timing of construction activities along the shoreline, and particularly during the critical times for fish spawning that are identified in this comment.</p>

No.	Comment	Response
7	<p>Item 9 references trees removed from the ROW along Segment 1 to be placed in the lake as fish habitat. We agree that this can be a productive use of those trees if done properly. An earlier section indicated the trees would be cut by chainsaw and placed in the lake. If possible, the entire tree, including the root wad should be removed with an excavator and placed in the lake. The mass and complexity of the root structure will help to anchor the tree and provide better fish habitat. Trees should be placed perpendicular to the shoreline with the bole end towards the shoreline and top towards the lake. The branches of the tree will need to be in contact with the lake bottom to keep the tree from floating away. If the trees branches will not be in contact with the bottom, the bole should be buried in the bank fill or cabled to an anchor system.</p>	<p>The comment will be provided to FHWA's final design team for consideration. When trees are identified for removal along the shoreline, the value of the root system for bank stabilization will be evaluated on a site-by-site basis relative to the fish habitat benefits of leaving the root wad attached for placement in the lake.</p>
8	<p>We support the use of large woody debris and rock to enhance fish habitat in reconstructed stream segments (item 15). However, the use of gabions for flow dissipation structures is generally not successful in this area due to the high bedload sediment load. The wire in gabion baskets tend to quickly fail. We would recommend rock as a more suitable flow-dissipating structure, but keeping in mind not to create a fish passage barrier by creating sub surface flows during low water periods. Prior to selecting a final design for stream reconstruction, we would appreciate the opportunity to share our expertise and contribute to the design work.</p>	<p>The FHWA design team will consult with resource agencies during final design on the most appropriate flow dissipation structures in reconstructed stream segments.</p>
9	<p>On page 3-82, culverts in State Creek, Dry Gulch and Stacel Draw are all identified for replacement. We agree that all three of these culverts should be replaced with culverts that can pass fish (both upstream and downstream) and bedload sediment. Where fill is required across a floodplain, we recommend placement of relief culverts in the fill.</p>	<p>The FHWA design team will consult with resource agencies during final design on the design of replacement culverts that will pass fish and bedload sediment.</p>
10	<p>We agree with the decision to build a bridge across Lilypad Bay in order to reconnect the wetland. We also agree with the sequencing of bridge construction and removing the old road fill after the bridge is done.</p>	<p>Comments noted.</p>
11	<p>The mitigation measures designed to protect the nesting bald eagle on the east end of the lake and the heron rookery on the west end of the lake are correct (p 3-108 and 3-109). We also agree with placement of drift fences on any road cuts with vertical drops of over 15 feet to prevent wildlife mortality (p. 3-110).</p>	<p>Comments noted.</p>

No.	Comment	Response
12	<p>Recreation - One of the biggest concerns we had during the last five years of commenting on this project was insuring that shoreline fishing opportunity will be at least maintained and hopefully enhanced. The FEIS does a good job of demonstrating how important a fishery Fernan Lake provides, especially for bank anglers. Fernan Lake is a designated Family Fishing Water and because of its close proximity to north Idaho's largest urban area, the lake receives a tremendous amount of fishing pressure all year long.</p> <p>We appreciate incorporation of designated parking areas along MP 1.5, 1.8 and 2.2. We are concerned, however, that these aren't necessarily insured by the language stated on p. 3-162 where it states that "Turnouts and parking areas would be created in Segment 1 (<i>possibly</i> in three locations: MP 1.5, MP 1.8, and MP 2.2) where the road is realigned to the north (away from the lake)." The word possibly is what has us concerned. We believe all three of these areas should be planned for parking. In addition we hope that the areas are designed to accommodate placement of portable toilets, similar to what currently exists at the east end boat launch.</p>	<p>The parking areas at MP 1.5, 1.8, and 2.2 included in the preliminary design of selected Alternative G will be more fully developed during final design.</p> <p>The final design team will continue to work with resource agencies to ensure that ancillary facilities can be accommodated in the future.</p>
13	<p>Figure 3-14 does a good job of showing the existing dispersed bank fishing locations with shaded areas and fish icons. What concerns us is that dispersed areas from MP 0.1 to MP 1.3 will be totally eliminated with the new road and all of the bank access will be concentrated in the shallow east end of the lake. We may have replaced about the same number of bank fishing locations, but if they are all concentrated in one part of the lake that is not as desirable for fishing during the late summer when it becomes weedy, then bank fishing recreational opportunity will decline. Bank anglers like fishing the bank for trout between MP 0.1 and MP 1.3 all spring and summer and much of the ice fishing in the winter occurs along this area</p> <p>The concern about loss of bank fishing opportunity was brought up at an interagency meeting during the late winter of 2004-2005. Regional Fisheries Manager Ned Horner requested that additional parking areas be considered anywhere along the ROW. They don't need to be the large, deep parking areas that are designed at MP 1.5 and MP 1.8, but they could be parallel parking areas that could accommodate as little as 1-2 cars on either the lake or land side of the highway. One good area is the bay at MP 0.7. The topography is relatively flat and this is already a popular fishing area. We also recommend sites between MP 0.1 and MP 0.7 and at MP 1.3 be designed to accommodate some bank angling opportunity.</p>	<p>Environmental commitments R-1 through R-6 were added in the FEIS (page 4-14) in response to comments on the DEIS and related meetings with resource and regulatory agencies. R-1 specifically addresses the concern expressed in this comment.</p> <p>FHWA will continue to consult with resource agencies during final design of parking areas.</p>

No.	Comment	Response
14	<p>Fernan Creek Relocation - We have reviewed the conceptual plan in Appendix E to relocate approximately 2,300 linear feet of Fernan Creek into the eastern channel. We participated in the development of this plan in the field and believe it will provide excellent benefits for both fish and wildlife.</p>	<p>Comment noted.</p>
15	<p>In summary, we appreciate the opportunity to have worked on the development of this project. Construction work in 2007 will have significant short term impacts on fish, wildlife, water quality, wetlands and anglers. However, we believe the long term benefits of a reconstructed highway and the opportunity to improve storm water drainage, Fernan Creek alignment, fish habitat, angler access and highway safety will outweigh negative impacts.</p> <p>We will continue to be available for consultation on any aspect of this project where input on fish and wildlife issues are needed.</p>	<p>Comment noted.</p> <p>FHWA appreciates the input and feedback by regulatory and resource agencies during the planning phase of the project, and look forward to continuing consultations during final design.</p>
16	<p>As a board member of the Fernan Lake Association, I reviewed the EIS report and I have concerns on the new parking proposal. All of the new parking is located on the last half of the lake and this will cause a safety concern. The people who normally fish at the other end of the lake will either park or walk in a potentially dangerous location. Ned from the Idaho Department of Fish & Game also agrees with my concern and he has voiced this same concern last year in a meeting. Besides a parking over-load on part of the lake, it will also cause an imbalance in the fishery. One suggested new parking location would be at mile marker ".7".</p> <p>Please review your three page parking map and see if you notice any other places for parking. I drive this road almost every day and I have several parking locations to suggest.</p>	<p>See response to Comment 13. Additional parking opportunities along the lake will be identified and developed during final design.</p>
17	<p>My family and I are also concerned with the amount of cut slope on our property, especially on two points. I would like to discuss my concerns to you in more detail at your convenience. Let me know what works best. Thanking you in advance for responding to this matter promptly.</p>	<p>FHWAs design team and right-of-way specialists will meet with each landowner along Fernan Lake Road to learn about site conditions and utility locations, and to discuss real estate procedures.</p>
18	<p>Roadside parking: The FEIS designates parking at three locations, all at the east end of the lake. There are times when the bulk of the fishing, partying, etc., does occur at the east end; however, there is consistent use of the bank at the west end of the lake. We feel it would be deficient to overlook this area for designated parking. Unlike "Field of Dreams", build it, for they are already there! In a nutshell, the recreationists will continue to park on the road if there is no designated parking. For your reference, the stretch of road we refer to occurs between mileposts 0.0 and 0.8. There are least two other pullouts that could be expanded for designated parking.</p>	<p>Environmental commitment R-1 on FEIS page 4-14 states "Incorporate roadside pullouts and off-road parking (one or two vehicles each) to improve safety and opportunity for shoreline access along Fernan Lake Road, where possible, near traditionally used locations west of MP 1.0 (see Figure 3-14)." This commitment will also be in the ROD.</p> <p>This incorporation would occur during the final design phase after the ROD. FHWA's design team will seek input from the Association, residents along the lake, and resource agencies on the location and configuration of these small parking areas.</p> <p>Also see the response to Comment 13.</p>

No.	Comment	Response
19	<p>Alternate E versus alternate G: We are aware the advantages you perceive with this option: the pile driving depth, the use of the bypass to contain soil disturbance, the aesthetics of keeping the bridge in the background so as not to offend anyone's view of the lake, and the "slight" long range decrease in accident rate. The bottom line is you view this alternative as less expensive. With this in mind, we ask that you get creative in viewing alternate E. As proposed at last year's meeting, a floating bridge could solve many of the perceived problems with E. Potentially, only the abutments at each end would have to be excavated. The bridge sections could be launched at the low end of the lake and floated into position. The advantages with E would be thus: reduce road mileage, less expensive, wildlife habitat at the back end of the bay left undisturbed (Mallard, Wood ducks, Canadian Geese nesting area, and feeding ground for moose,) and ultimately a safer road-irregardless of what the computer simulations indicate. The climate around the lake, historically, is not one of deep snow that regularly demands plowing (producing good traction), but rather a milder climate which leaves the temperature hovering around freezing. Numerous times the snow pack on the road has turned to ice when the precipitation becomes rain, and vice versa, when the rain freezes on the asphalt. We mean no disrespect to East Side Highway District. They do a commendable job on this school bus route, but this is just one road in their district. To build a radiused bridge will only increase the treachery of winter driving.</p>	<p>Evaluation of a floating bridge by FHWA engineers found that Lillypad Bay is too short for a feasible floating bridge. At each end of a floating bridge, there must be conventional pier-supported bridge span(s). These pier-supported approaches would support a hinged ramp, fixed at the landward end, and movable vertically where it joins the floating span. This hinged span is necessary as an approach to the floating part of the bridge, because the floating span needs to move vertically as it floats on the fluctuating level of Fernan Lake.</p> <p>Looking at the alignment for Alternative E, the hinged span on the west end of the bridge could not start until sta. 13+150, which is at the end of the curved bridge approach. The hinged span cannot be on the curved part of the bridge, but must be on a tangent (straight line). Assuming a hinged ramp is 30 meters long, the beginning of the floating span would then be at sta. 13+180.</p> <p>The floating span would end at sta. 13+240, which would allow enough room on the eastern end of the bridge for a hinged span and fixed span, before joining the proposed driveway approach at sta. 13+310. That would leave, at most, the floating part of the bridge to be 60 meters (196 ft.), from sta. 13+180 to 13+240.</p> <p>A hinged approach span of 100 ft. is short enough to create an abrupt bump in the bridge profile, illustrated in the picture below. This abrupt bump in the vertical profile would require that the speed be lowered on the bridge, which would create a safety hazard for the traffic. If the hinged spans were increased in length allowing the humps to be smoothed to a 25 mph speed limit, then the floating span would become even shorter.</p>  <p>Thus a floating bridge would not make Alternative E the environmentally preferred alternative.</p>

No.	Comment	Response
20	<p>With respect to the property owners' request to return unused ROW under alternative E, we back them on this petition. Again some creativity is required. As this bay is heavily fished from the bank in the spring, the extrapolation is the fishing demand will remain. One thought to consider is to put a trail back in each side of the bay utilizing a portion of the existing road bed (excavated down to a couple feet above the water line). Possibly, to prevent trespassing, the driveways could be separated from the public trail by some type of fence.</p>	<p>FHWA's Division Engineer considered this suggestion when deciding which Alternative to select. Disposition of the existing road easements under Alternative E would not cause it to become the environmentally preferred alternative.</p>
21	<p>The FEIS, as did the DEIS, lists the property owner where the alternative G bridge would be located as unknown. For your information, the owners of that ground are Jeff and Vendla Wilkins.</p>	<p>FHWA appreciates this update to parcel data available from Kootenai County records.</p>
22	<p>I wanted particularly to review the EPA comment responses, and to see what comments the tribes had provided to FHWA and the responses to the tribes. However, the Appendix D does not indicate who sent comments, and who submitted each comment. While I can page through and find the EPA comments based upon recognition of the comments, I cannot do this for any other entity unless there are clues in the comments as to who the author is. So I thought I would make a recommendation to FHWA to, in the future, include in your response to comments section a means to identify who sent each comment. This tends to be done in various ways in different EISs, but one general approach is to assign each commentor a number, and then label each comment and response with that number to indicate the author. This would facilitate review of the comments.</p>	<p>Thank you for this recommendation, which FHWA will consider for future EISs. For the Fernan Lake Road project, sources of DEIS comments were identified in the preliminary response materials distributed to EPA and other agencies for our Sep-2004 meeting. For FEIS, we decided that comment-responses in FEIS Appendix D not be coded to indicate source. The rationale was to reinforce the importance of and equal consideration given to each comment regardless of source.</p>
23	<p>Tribal consultation.</p>	<p>On May 17, 2005, FHWA's Project manager communicated with Coeur d'Alene tribe Representative, Mr. Quannah Matheson. He indicated that the Tribe will not have any additional comments on FEIS. He directed FHWA to their July 21, 2004 letter, which indicated that they would like to be consulted if Alternative Fm is selected, in which case the Tribe would get more involved. Mr. Matheson also stated that they need to be kept informed on the progress of the project, regardless of what alternative gets selected.</p>

APPENDIX B
MOA BETWEEN FHWA AND IDAHO SHPO

MEMORANDUM OF AGREEMENT
BETWEEN
U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY
ADMINISTRATION, WESTERN FEDERAL LANDS HIGHWAY DIVISION
AND THE
IDAHO STATE HISTORIC PRESERVATION OFFICER
REGARDING THE
FERNAN LAKE ROAD SAFETY IMPROVEMENT PROJECT ID PFH 80-1(1)
KOOTENAI COUNTY, IDAHO

WHEREAS, the U.S. Department of Transportation, Federal Highway Administration, Western Federal Lands Highway Division (WFLHD) has determined that the Fernan Lake Road Safety Improvement Project (undertaking) may have an adverse effect on a portion of the Fernan Lake Road (10-KA-388) which is eligible for the National Register of Historic Places, and has consulted with the Idaho State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470);

WHEREAS, in accordance with 36 CFR Section 800.6(a)(1), WFLHD has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR Section 800.6(a)(1)(iii);

NOW, THEREFORE, WFLHD and the Idaho SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

WFLHD shall ensure that the following measures are carried out:

1. HISTORIC PROPERTY DOCUMENTATION: Prior to construction of the Fernan Lake Road Safety Improvement Project, the historic segments of the Fernan Lake Road will be documented to provide a permanent record of the Civilian Conservation Corps (CCC) built features including the road alignment and rock retaining walls and culverts, as well as the road's setting along the lakeshore. The documentation will be determined in consultation with SHPO, but shall include large-format black and white photographs. The Historic American Engineering Record (HAER) standards should be used as a guideline for processing, printing, and preparing photographs and negatives for submission to the Idaho SHPO. This will include one set of photographs, one set of negatives, and a photograph index. The second set of photographs shall be provided to the Museum of North Idaho.

The photographic documentation will be accompanied by written data that shall include a location map and the history, and description of the Fernan Lake Road. The written documentation shall incorporate data from *Cultural Resources Investigations from the Fernan Lake Road Safety Improvement Project, Kootenai County, Idaho*, by C.J. Miss and N.F. Renk, 2003.

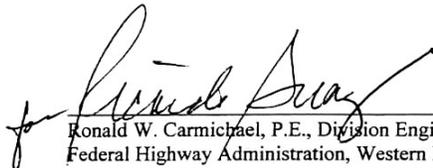
All of the documentation shall be submitted to and accepted by the Idaho SHPO prior to commencing construction along the Fernan Lake Road.

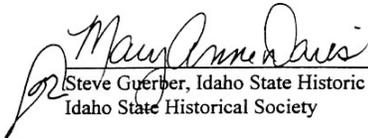
2. **ROADSIDE INTERPRETIVE DISPLAY:** An outdoor roadside interpretive display will be developed, designed, and installed at an existing administrative, recreation or interpretive site near or along Fernan Lake Road. Said display shall convey information regarding the history, engineering, and construction of the road. The content, design, and location of the display shall be determined in consultation with the SHPO and in cooperation with the Idaho Panhandle National Forest and the Museum of North Idaho.
3. **DRIVING TOUR:** Funds shall be disbursed to the Museum of North Idaho to support printing of a driving tour of historical locations in Kootenai, Shoshone, and Benewah counties, Idaho. The publication is in draft form and has 8 tours, one of which includes the Fernan Lake Road. The draft driving tour shall be submitted to SHPO and WFLHD for review prior to publication. Two copies of the final tour publication shall be submitted to SHPO and WFLHD.
4. **DURATION:** This agreement shall expire when the project is complete.
5. **UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES:** Prior to construction, an Unanticipated Discovery Plan shall be developed, submitted, and accepted by SHPO. This plan will ensure that no adverse effects occur beyond those incurred upon discovery of unanticipated cultural resources. The plan presents a protocol for handling discoveries that includes halting construction in the vicinity of the discovery, notification of agency personnel, evaluation of the resource, and development of a treatment plan as necessary, and encompasses all types of cultural resources including human remains.
6. **DISPUTE RESOLUTION:** Should any party of this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, WFLHD shall consult with the objecting party(ies) to resolve the objection. If WFLHD determines, within 30 days, that such objections cannot be resolved, WFLHD will:
 - A. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR Section 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise WFLHD on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by WFLHD in reaching a final decision regarding the dispute.
 - B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, WFLHD may render a decision regarding the dispute. In reaching its decision, WFLHD will take into account all comments regarding the dispute from the parties of the MOA.
 - C. WFLHD's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. WFLHD will notify in writing all parties of its decision before implementing that portion of the undertaking subject to dispute under this stipulation. WFLHD's decision will be final.

7. AMENDMENTS AND NONCOMPLIANCE: If any signatory of this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that the amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR Part 800.9(c)(7) and 800.6(c)(8). This amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation 8 below.
8. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation 7, it may be terminated by any signatory or invited signatory. Within 30 days following termination, the WFLHD shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR Part 800.6(c)(1), or request the comments of the Council under 36 CFR Part 800.7(a), and proceed accordingly.

Execution of this MOA by WFLHD and the Idaho SHPO, the submission of documentation and filing of this MOA with the Council pursuant to 36 CFR Part 800.6(b)(1)(iv) prior to WFLHD's approval of this undertaking, and implementation of its terms evidence that WFLHD has taken into account the effects of this undertaking on historic properties and afforded the Council an opportunity to comment.

SIGNATORIES:

 _____ Date 1/26/05
Ronald W. Carmichael, P.E., Division Engineer
Federal Highway Administration, Western Federal Lands Highway Division

 _____ Date 2/17/05
Steve Guerber, Idaho State Historic Preservation Officer
Idaho State Historical Society

APPENDIX C

ESA-SECTION 7 INFORMAL CONSULTATION WITH U.S. FISH AND WILDLIFE SERVICE



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Upper Columbia Fish and Wildlife Office
11103 East Montgomery Drive
Spokane, Washington 99206



June 29, 2005

Sajid Aftab, A/E Project Manager
Federal Highway Administration
Western Federal Lands Highway Division
610 East Fifth Street
Vancouver, Washington 98661-3801

Subject: Fernan Lake Road Safety Improvement Project; FWS Ref: 1-9-05-I-257

Dear Mr. Aftab:

Thank you for your May 9, 2005, letter referencing a Biological Assessment (BA) for the Fernan Lake Road Safety Improvement Project. Your letter was received in our office on May 10, 2005, and requested our concurrence with your determination of effect for the bald eagle (*Haliaeetus leucocephalus*).

The proposed project will upgrade approximately 10 miles of the existing Fernan Lake Road (also known as Idaho Public Forest Highway 80) in Kootenai County, Idaho, just east of Coeur d'Alene to improve public safety by widening the road, revising vertical and horizontal alignments, and adding signs, guardrails, and striping. Activities will entail: vegetation clearing, including tree removal; slope excavation; blasting; construction of retaining walls; replacement of an existing bridge, which will require the construction of abutment foundations and pile driving; culvert installation/upgrade/replacement; resurfacing with crushed aggregate; relocation of Fernan Creek in conjunction with road realignment; and revegetation with native grasses, forbs, shrubs, and trees.

Portions of the project area occur within ½ mile of a bald eagle nest, which is situated near the southern edge of Fernan Lake, and has successfully fledged young each year since 1999. At the time of this nest's establishment, Fernan Lake Road and many of the ongoing human activities associated with the use of the road, nearby residences, and Fernan Lake were in existence. Ostensively then, this particular eagle pair is somewhat tolerant of human disturbance related to use of the road, nearby residences, and Fernan Lake. However, blasting and pile driving are noise disturbances that this eagle pair may not have been exposed to and may not tolerate. Therefore, as described in the BA, prior to implementing blasting and pile driving activities within 1 mile of the nest, the project biologist will survey the nest for activity. If the survey determines that the nest is active during the construction year(s), pile driving and blasting will

not occur within one mile of the nest during the nesting season (January 1 through August 15) or until the eaglets have fledged, as determined by the project biologist.

We have reviewed the information provided and concur with your finding that the proposed project "may affect, but is not likely to adversely affect" bald eagles. Concurrence by the Service is contingent upon implementation of the project and conservation measures described in the BA.

This concludes informal consultation pursuant to section 7(a)(2) of the Act. This project should be re-analyzed if new information reveals that effects of the action may affect listed species or critical habitat in a manner, or to an extent, not considered in this consultation; if the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation; and/or if a new species is listed or critical habitat is designated that may be affected by this project.

If you have further questions about this letter, or your responsibilities under the Act, please contact Bryon Holt at the above address (telephone: 509-893-8014; fax: 509-891-6748).

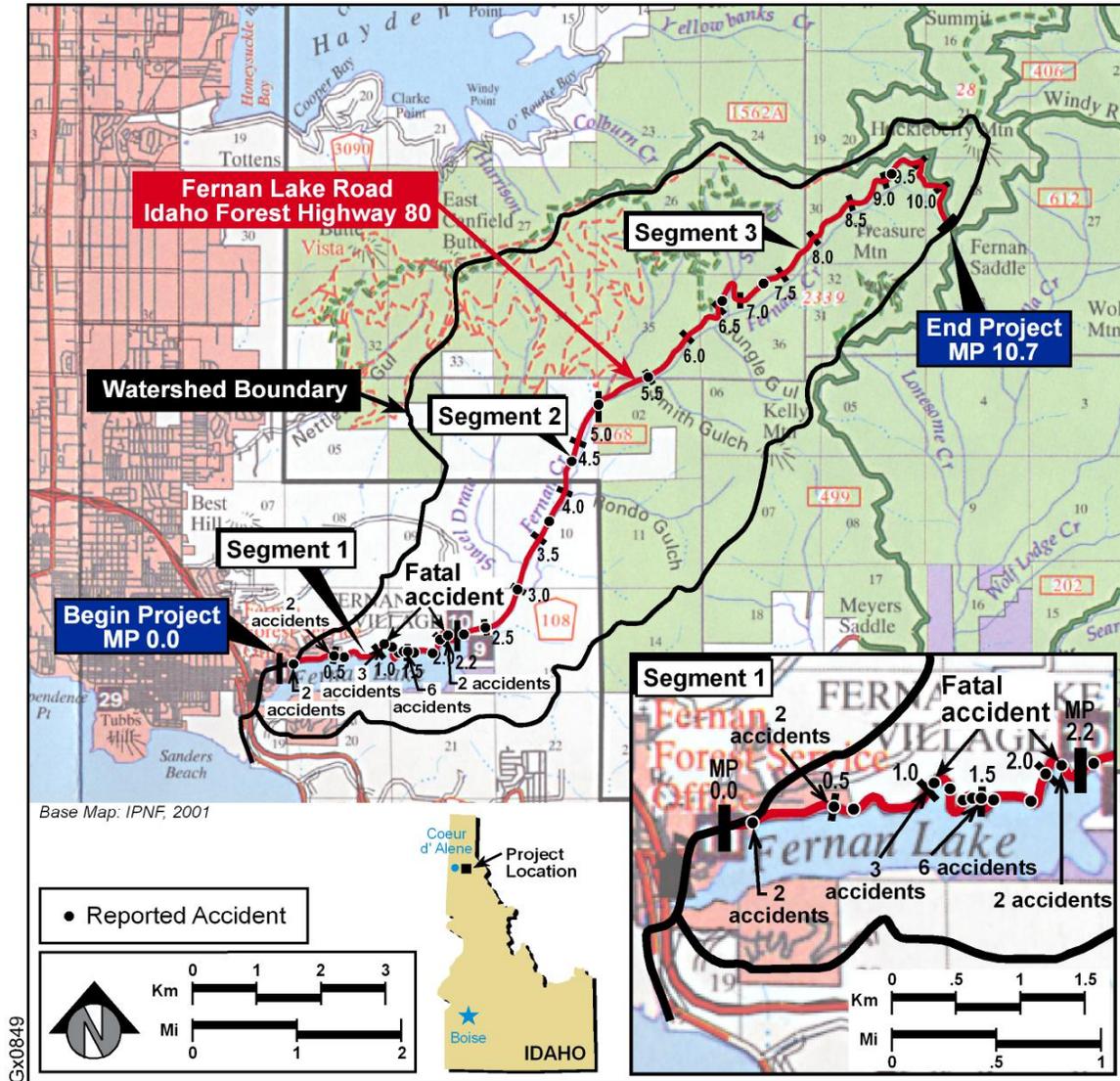
Sincerely,


For Supervisor

cc: IDFG, CdA

APPENDIX D
FIGURES AND TABLES

Figure 1. Project and Accident Locations



Gx0849

Figure 2. Build Alternatives Between MP 1.0 and MP 2.3

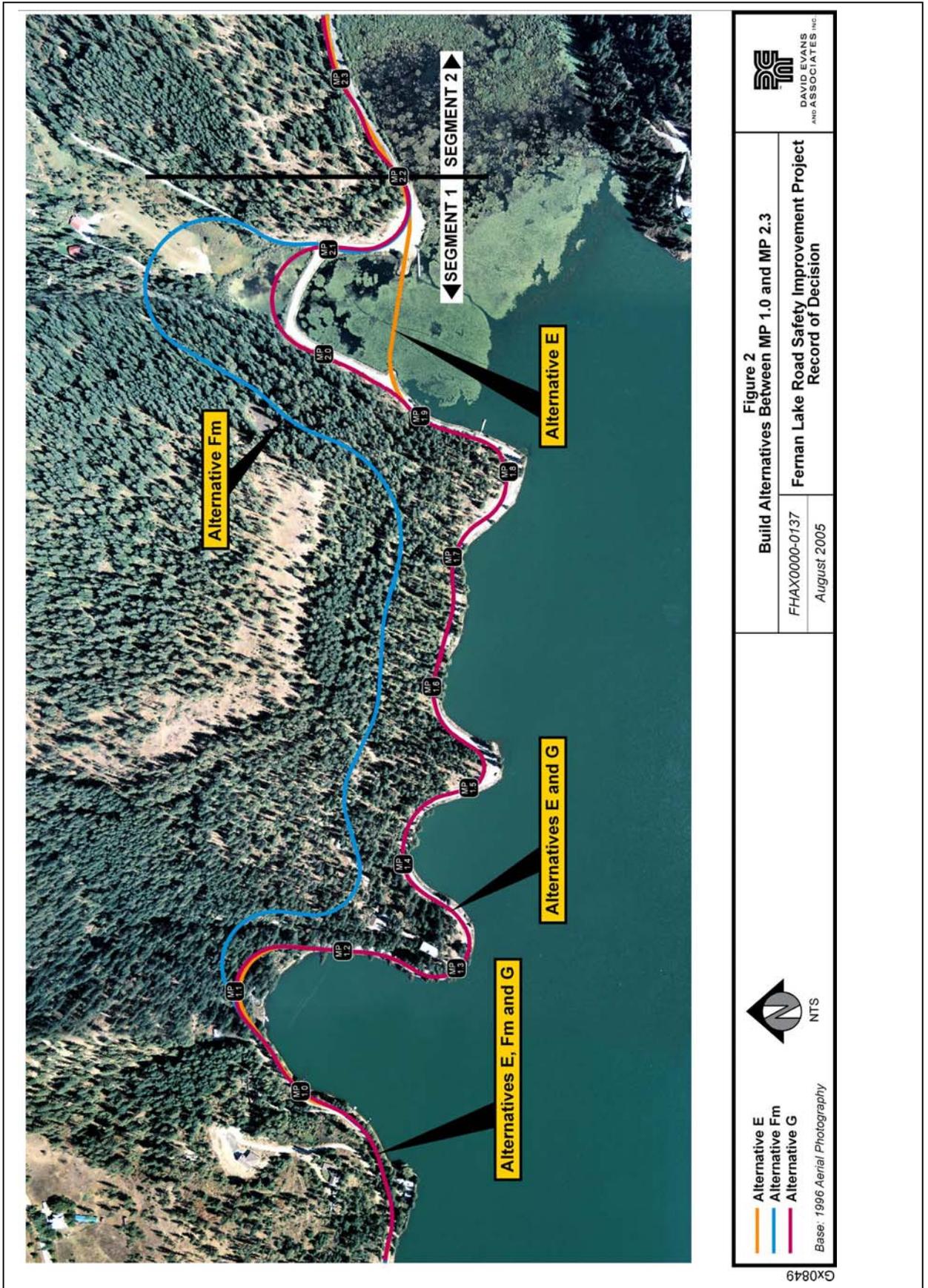


Table 1. Permits and approvals for Fernan Lake Road Project.

Permits, Stipulations, Approvals	Purpose
U.S. Forest Service Letter of Consent (Federal Land Policy and Management Act - 36 CFR 251)	To allow the FHWA to use National forest lands for road purposes and construction activities.
U.S. Fish and Wildlife Service Section 7 Consultation (Endangered Species Act – 50 CFR 402)	To ensure that the proposed project would not jeopardize the continued existence of threatened or endangered species, or result in the destruction or modification of critical habitat.
U.S. Army Corps of Engineers 404 Permit (Clean Water Act – 33 CFR 320)	To allow the FHWA to discharge dredged or fill material into waters of the U.S., including wetlands.
U.S. Environmental Protection Agency National Pollutant Discharge Elimination System Permit	To allow FHWA to discharge pollutants from a point source into waters of the U.S., such as storm water or construction dewatering.
Idaho Department of Environmental Quality 401 Certification (Clean Water Act - 40 CFR 121)	To certify that any activity requiring a federal license or permit that may result in any discharge into waters of the U.S. would not cause or contribute to a violation of state surface water quality standards.
Idaho Department of Lands Lake Encroachment Permit	To allow placement of fill, riprap, piers, bridges, or other structures in or near lake beds.
Idaho Department of Water Resources Stream Alteration Permit	To allow changes or impacts to stream channels, including restoration.
Idaho State Historic Preservation Officer Section 106 Review (National Historic Preservation Act 36 CFR 800)	To consult with the Idaho State Historic Preservation Office, Native American tribes, and the Advisory Council on Historic Preservation on cultural resources, historic properties, traditional uses, and mitigation of adverse effects.
Kootenai County, City of Coeur d’Alene, City of Fernan Lake Village Various Permits	To comply with local zoning and land use requirements.

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