CHAPTER 5 CONSULTATION, COMPLIANCE WITH FEDERAL AND STATE REGULATIONS, AND PREPARERS

This chapter lists federal and state regulations that have requirements for the actions in this Environmental Impact Statement. This section includes a list of preparers and contributors to the EIS and a list of recipients of the draft EIS. Information on public involvement, the scoping process, and key issues is included in Chapter 1.

CONSULTATION

The cooperating agencies consulted with Native American Tribes, the US Fish and Wildlife Service, and the State Historic Preservation Office. The status, details, and dates of these consultations are described under the laws and regulations sections below this section.

COMPLIANCE WITH FEDERAL, STATE, AND AGENCY REGULATIONS

The NPS and USFS will comply with all applicable federal, state, agency, and local regulations. The following regulations provide guidance and authority for managing federal land and the resources therein. This is by no means an exhaustive list of regulations but provides a general background of policies relevant to the decision analyzed in this EIS.

FEDERAL REGULATIONS

Glacier National Park's enabling legislation (1910) and jurisdictional legislation (1914)

An Act of Congress established Glacier National Park on May II, 1910. The enabling legislation gave the Secretary of the Interior the authority to "...make and publish such rules and regulations not inconsistent with the laws of the United States as he may deem necessary or proper for the care, protection, management, and improvement of the same, which regulations shall provide for the preservation of the park in a state of nature so far as is consistent with the purposes of this act, and for the care and protection of the fish and game within the boundaries thereof." An Act of Congress accepting cession by Montana of exclusive jurisdiction over lands within Glacier National Park (1914) further stated that the Secretary shall make such rules "...for the protection of the property therein, especially for the preservation from injury or spoliation of all timber, mineral deposits..., natural curiosities, or wonderful objects within said park, and for the protection of the animals and birds in the park from capture or destruction, and to prevent their being frightened or driven from the park".

The National Park Service Organic Act (1916)

Enacted by Congress in 1916, the Organic Act (16 USC §§ 1-18f, 39 Stat. 535) established, within the Department of the Interior, the National Park Service. The NPS was designated to "promote and regulate" the use of national parks, monuments, and reservations, "which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as

will leave them unimpaired for the enjoyment of future generations." The Organic Act gives the NPS authority to manage the parks, directing the Secretary of the Interior to "make and publish such rules and regulations as he may deem necessary or proper for the use and management of the parks, monuments, and reservations under the jurisdiction of the National Park Service."

General Authorities Act

The 1970 General Authorities Act (16 U.S.C. §§ 1a-1 et seq., Public Law No. 91-383) supplemented and clarified the NPS mandate. The Act reaffirmed and directed that "the promotion and regulation of the various areas of the National Park System . . . be consistent with and founded in the purpose established by [the Organic Act], to the common benefit of all the people of the United States." The Act further provided that: "The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress."

National Environmental Policy Act (NEPA) and Regulations of the Council on Environmental Quality (CEQ)

The National Environmental Policy Act applies to federal actions that may significantly affect the quality of the human environment. This generally includes projects or actions that involve the use of federal facilities or lands, federal funding, or federal authorizations. NEPA has three decisional mechanisms. A proposed federal agency action is first reviewed to see if it can qualify for a categorical exclusion (usually small, routine projects with no potential significant environmental effect; categories are identified in agency NEPA policies) or other exemption to the process. If not, then an EA is prepared. If it is concluded in the EA that adverse environmental impacts will be insignificant, then the agency can file a Finding Of No Significant Impact (FONSI), followed by implementing its preferred alternative. If the proposed project has the potential to "significantly affect" the quality of the human environment," then the EIS process must be followed. Briefly, these steps are: Notice of Intent, Scoping Process, Draft EIS, agency/public Review and Comment, Final EIS, Record of Decision (ROD), and agency action.

This Environmental Impact Statement meets the requirements of the NEPA and regulations of CEQ in evaluating the potential effects associated with activities on federal lands. This Draft EIS will be released for a 60-day public comment period. The Final EIS will respond to comments from the draft document. Finally, a Record of Decision (ROD) will be prepared to document the final decision on the proposed project and any modifications in the selected alternative 30 days after release of the Final EIS.

Endangered Species Act of 1973, as amended (16 USC 1531 et. Seq)

Section 7 of the Endangered Species Act is designed to ensure that any action authorized, funded or carried out by a federal agency likely would not jeopardize the continued existence of any endangered or threatened plant or animal species. If a federal action may affect threatened or endangered species, then consultation with the US Fish and Wildlife Service (FWS) is required. The NPS initiated informal consultation with the FWS on May 17, 2005. A Biological Assessment (BA) will be prepared on the Preferred Alternative and submitted to

the FWS with the final EIS for their review and concurrence. The FWS will issue a Biological Opinion prior to NPS and USFS issuance of a Record of Decision.

The findings of the BA are based on the best data and scientific information currently available. If new information in the future reveals effects that may impact threatened, endangered, or proposed species or their habitats in a manner or to an extent not considered in this EIS or BA, or the proposed action is subsequently modified in a manner that causes a new effect, or if new species are listed or habitat is identified that may be affected by the action, a revised BA would be prepared. If the Park or Forest concludes that there are no changes from the original determination of effects to listed species in the BA, concurrence from the FWS would be requested on those species with a "may effect" determination. Should a determination of "not likely to adversely affect" change to "likely" based on the potential for new adverse effects, the Park would enter into formal consultation again with FWS.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 USC §§ 703-712) implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 CFR. 10.13. Further, the regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species as well as any part, egg or nest of such bird. Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by the USFWS, makes it unlawful "by any means or manner, to pursue, hunt, take, capture [or] kill" any migratory bird except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale purchase, barter, or the offering of these activities, except as permitted by the implementing regulations.

Bald Eagle Protection Act

The Bald Eagle Protection Act of 1940 as amended (16 U.S.C. §§ 668-668d) prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. The Act imposes criminal and civil penalties on anyone in the U.S. or within its jurisdiction who, unless excepted, takes, possesses, sells, purchases, barters, offers to sell or purchase or barter, transports, exports or imports at any time or in any manner a bald or golden eagle, alive or dead; or any part, nest or egg of these eagles; or violates any permit or regulations issued under the Act.

National Historic Preservation Act 1966, as amended (16 USC 470, et. seq.)

The railroad and the snowsheds may be eligible for listing in the National Register of Historic Places; therefore, the undertaking is subject to compliance with Section 106 of the National Historic Preservation Act. This Act created the National Register of Historic Places along with an Advisory Council on Historic Preservation. Section 106 of the Act requires that federal agencies allow the Council an opportunity to comment whenever their undertakings may affect National Register resources or resources eligible for listing in the Register. Section 110 requires federal agencies to identify, evaluate, inventory, and protect National Register resources or resources eligible for the Register on property they control. While the railway and the snowsheds are private property on a federal right-of-way, the federal action of permitting activities that may impact those features prompt compliance with Section 106.

Timothy Light, USFS archeologist, initiated consultation with the State Historic Preservation Office in September 2005.

The regulations permit federal agencies to coordinate Section 106 compliance with the National Environmental Policy Act. 36 CFR 800.8c requires that the agency notify the advisory council and the State Historic Preservation Office in advance if they plan to do so. The development of this Plan/EIS meets some of the consultation requirements of Section 106, but it does not meet the documentation standards required to support a finding of effect. This documentation will not be available until specific railroad or snowshed construction documents are prepared.

Archeological Resources Protection Act

The Archeological Resources Protection Act (16 USC §470aa et seq.) established the importance of archeological resources to the nation's heritage. It required permits to excavate; notification to Indian tribes of possible harm to culturally significant sites; criminal penalties for damage to archeological resources; and confidentiality of information concerning the nature and location of archeological resources.

Clean Water Act

The US Army Corps of Engineers (COE) is responsible for authorizing the discharge of dredge or fill materials into waters of the US including wetlands under Section 404 of the Clean Water Act. The Army Corps of Engineers must be consulted when changes to navigable streams or waterways of the United States are proposed. Section 313 of the Clean Water Act requires that Federal agencies comply with all substantive and procedural requirements related to water quality. Under Section 303 of the Clean Water Act, States have the primary responsibility to develop and implement water quality programs, which include developing water quality standards and Best Management Practices (BMPs). State water quality standards are based on the water quality necessary to protect beneficial uses.

Environmental Protection Agency policy requires each state to implement a Non-degradation Policy. Under this policy, water quality must be maintained to fully support existing beneficial uses. Existing water quality that is higher than the established standards must be maintained at the existing level unless the board of health and environmental sciences determines that a change in water quality is justifiable due to social and/or economic reasons (CFR Vol. 48, No. 217, 131.12, Nov, 8, 1983; Montana Water Quality Act, Section 75-5.)

Wild and Scenic River Act

This Act of 1968 (16 U.S.C. §§ 1271-1287) establishes a National Wild and Scenic Rivers System for the protection of rivers with important scenic, recreational, fish and wildlife, and other values. The Act designates specific rivers for inclusion in the System and prescribes the methods and standards by which additional rivers may be added. Rivers are classified as wild, scenic, or recreational. The Act contains procedures and limitations for control of lands in federally administered components of the System and for disposition of lands and minerals under federal ownership. Hunting and fishing are permitted in components of the System under applicable federal and state laws.

In 1976, Congress designated the Middle Fork of the Flathead River as a part of the national Wild and Scenic River system. The Middle Fork is designated as "recreational" for the entire length bordering Glacier National Park. The Middle Fork of the Flathead River is jointly

administered by the NFS and the NPS in accordance with Section 7(b) of the Wild and Scenic Rivers Act (16 USC). The administering agency of the river is responsible to determine if a "water resources project" has "direct and adverse" effects on the values for which a river is recommended for designation. The NPS has a Memorandum of Agreement with the USFS (September 2001), which provides for the Flathead National Forest concurrence on NPS projects within designated rivers. The proposed avalanche hazard mitigation project may have minor impacts on water quality in Bear Creek which runs into the Middle Fork of the Flathead River. The adaptive nature of water quality monitoring will modify the explosive use program if any water quality degradation is recorded.

A 7B determination under the Wild and Scenic Rivers Act is not required for any of the alternatives examined in this document as the activities do not take place below, above, or on a stream tributary to a designated river.

Clean Air Act

The Clean Air Act gives the federal land manager and the park manager the responsibility for protecting air quality and related values, including visibility, vegetation, wildlife, soils, water quality, cultural resources, recreational resources and public health, from adverse air pollution impacts. Section 176 of the Clean Air Act requires any action on the part of a federal agency in an area considered nonattainment for air quality standards to conform to the state's efforts to attain and maintain these standards. The Environmental Protection Agency's General Conformity Rule (40 CFR Part 93, Subpart B), effective January 31, 1994, implements the statutory provisions of Section 176(1) of the Clean Air Act which prohibits federal agencies from conducting activities that contribute to new or existing violations of National Ambient Air Quality Standards, or delays in timely attainment of these standards.

Wilderness Act

The Wilderness Act of 1964 (16 USC 1131 et seq.) established a wilderness preservation system. Public law 88-577 established a national wilderness preservation system and describes wilderness with the following language:

A wilderness ... is...an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean... an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which: I) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; 2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; 3)has at least 5,000 acres or land or is of sufficient size as to make practicable its preservation and use in an unimpaired conditions; and 4)may also contain ecological, geological, or other features of scientific, educational, scenic or historical value.

MONTANA STATE REGULATIONS

Montana State Water Quality Law

As listed in ARM 17.30.608 (I) the State of Montana has classified the waters in the Flathead Basin as B-I. Waters classified as B-I are suitable for drinking, culinary, and food processing purposes after conventional treatment. Water quality must also be suitable for bathing,

swimming, and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl, and furbearers; and agricultural and industrial water supply. Additional criteria specific to sediment are found within Section 17.30.623(2) (f) of Montana Water Quality Standards where it is stated that "No increases are allowed above naturally occurring concentrations of sediment, settleable solids, oils, or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife". Naturally occurring as defined by MCA 17.30.602 (17), includes conditions or materials present during runoff from developed land where all reasonable land, soil, and water conservation practices (BMPs) have been applied. Reasonable practices include methods, measures, or practices that protect present and reasonably anticipated beneficial uses.

AGENCY GUIDELINES

The National Park Service Management Policies 2006 (NPS 2006) is the basic NPS-wide policy document. It is the highest of three levels of guidance documents in the NPS Directives System. The Directives System is designed to provide NPS management and staff with clear and continuously updated information on NPS policy and required and/or recommended actions. The following sections relate specific policy on topics pertinent to this EIS.

National Park Service: Management Policies (2006) Regarding Park Use and Impacts

1.5-In its role as steward of park resources, the National Park Service must ensure that park uses that are allowed would not cause impairment of, or unacceptable impacts on, park resources and values. When proposed park uses and the protection of park resources and values come into conflict, the protection of resources and values must be predominant.

1.4.7.I-The impact threshold at which impairment occurs is not always readily apparent. Therefore, the Service will apply a standard that offers greater assurance that impairment will not occur. The Service will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. ... unacceptable impacts are impacts that, individually or cumulatively, would

- be inconsistent with a park's purposes or values, or
- impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or
- create an unsafe or unhealthful environment for visitor or employees, or
- unreasonably interfere with an appropriate use, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.

National Park Service: Management Policies (2006) regarding Tribal Consultation

5.2.1-... the Service will be especially mindful of consulting with traditionally associated peoples- those whose cultural systems or way of life have an association with park resources and values that predates the establishment of the park.

Consultation with federally recognized American Indian tribes will be on a government-to-government basis. The service will notify appropriate tribal authorities (such as tribal historic preservation officers) about proposed actions when first conceived, and by subsequently

consulting their appointed representatives whenever proposed actions may affect tribal interests, practices, and traditional resources (such as places of religious value).

The Blackfeet and the Confederated Salish and Kootenai Tribes of Montana have been identified as tribal groups concerned with the management of heritage resources on the Flathead National Forest. The tribes were contacted in the initial planning stages of the Middle Fork avalanche hazard mitigation project in order to establish lines of communication between the parties, to advise them on the scope of the undertaking including potential effects, and to make their resource concerns (if any) an official part of the project file. A letter from the Blackfeet Tribal Historic Preservation Officer (June 1, 2005) stated "the Blackfeet Tribe requests to participate in the consultation process for this project." The Confederated Salish and Kootenai Tribe did not send correspondence regarding this project. A letter from the Blackfeet Tribal Historic Preservation Officer (May 26, 2006) stated that the Blackfeet Tribe is opposed to explosive use in the park and would like to see BNSF build snowsheds instead of use explosives. This letter stated that the tribe is concerned that explosive use would be "disruptive and detrimental to the cultural and natural environment." Consultation with the Blackfeet Tribe about their concerns will occur between the draft and final EIS.

National Park Service: Management Policies (2006) regarding Wilderness

6.3.1 – For the purposes of applying these policies, the term "wilderness" will include the categories of eligible, study, proposed, recommended, and designated wilderness. Potential wilderness may be a subset of any of these five categories. The policies apply regardless of category.

The National Park Service will take no action that would diminish the wilderness suitability of an area possessing wilderness characteristics until the legislative process of wilderness designation has been completed. Until that time, management decisions pertaining to lands qualifying as wilderness will be made in expectation of eventual wilderness designation. This policy also applies to potential wilderness, requiring it to be managed as wilderness to the extent that exiting non-conforming conditions will allow.

6.4.3- Recreational uses in National Park Service wilderness areas will be of a nature that

- enables the areas to retain their primeval character and influence;
- protects and preserves natural conditions;
- leaves the imprint of man's work substantially unnoticeable;
- provides outstanding opportunities for solitude or primitive and unconfined types of recreation; and
- preserves wilderness in an unimpaired condition.

The area north of the railroad tracks in Glacier National Park is recommended wilderness. The Great Bear Wilderness on National Forest lands south of US Highway 2 begins midslope in John F. Stevens Canyon. The use of explosives in Alternative C and D would have an adverse impact on wilderness on park and forest lands. The installation of blaster boxes, Avalhex type systems, and weather instruments would affect wilderness. A continuous program of explosive use under Alternative D would have the greatest impact on wilderness and may ultimately have a bearing on the suitability of the area for wilderness designation.

National Park Service: Management Policies (2006) regarding Water Quality 4.6.3 – Take all necessary actions to maintain or restore the quality of surface waters and

ground waters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations.

4.6.6 – The Service will manage watersheds as complete hydrologic systems, and will minimize human disturbance to the natural upland processes that deliver water, sediment, and woody debris to streams. These processes include runoff, erosion, vegetation and soil disturbance, fire, insects, meteorologic events, and mass movements.

National Park Service: Management Policies (2006) regarding Natural Sound

4.9- Park natural soundscape resources encompass all the natural sounds that occur in parks including the physical capacity for transmitting those natural sounds and the interrelationships among park natural sounds of different frequencies and volumes. Natural sounds occur within and beyond the range of sounds that humans can perceive, and they can be transmitted through air, water, or solid materials. The National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks.

The Service will take action to prevent or minimize all noise that, through frequency, magnitude, or duration, adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified as being acceptable to, or appropriate for, visitor uses at the sites being monitored.

National Park Service Explosive Use Policy

The authority and protocols for using explosives in a national park comes from the following regulations:

- 36CFR2.38: "Using, possessing, storing, or transporting explosives, blasting agents or explosive materials is prohibited, except pursuant to the terms and conditions of a permit. When permitted, the use, possession, storage and transportation shall be in accordance with applicable Federal and State Laws."
- Director's Order #65: *Explosives Use and Blasting Safety*: "This Director's Order applies to all blasting operations conducted within the boundaries of the NPS, whether conducted by NPS or other Federal personnel, commercial contractors, or others (including utility companies)." This DO has a sunset date of 2003; however, this directive stands until a new order takes its place.
- National Park Service Management Policy 8.6.II *Other Special Park Uses*, which states that the use of explosives may be allowed under permit or special regulations.

Glacier National Park uses explosives on a very limited basis for the purpose of trail and road maintenance, under the direction of the Chief Park Blaster. Explosives are occasionally used on the Going-to-the-Sun Road to break up large boulders that have fallen on the road surface, so they can be moved by equipment. Broken pieces are then used in wall repair and reconstruction. The types of explosives utilized are emulsions (a non-nitroglycerin based high explosive that is water resistant and has sufficient velocity). These are set off by an electrical initiation system for safe control of the blast timing. They are used under controlled circumstances with small, drilled charges that limit noise and flyrock.

In 1996, Glacier National Park attempted to use hand charges (1kg cast primer explosives) to break a cornice above the Going-to-the-Sun Road. The hand charges were dropped from a helicopter onto the cornice. The cornice did not release initially, but released several hours

after the initial detonation. Reports that mountain goats were under the cornice when it released are unfounded and there are no records that wildlife was affected by the cornice breaking. Locator chips were not used on the explosives. One charge failed to detonate and was lost for several weeks until retrieved by NPS personnel. This type of explosive use was only attempted once and GNP determined that this method was unsuccessful, unpredictable, and too risky for continued use in the park.

For trail maintenance, explosives are used to pioneer a path across exceptionally steep, dangerous, snowdrifts where passage by visitors would be greatly delayed due to late season melting. This is limited to a few key locations and only if warranted by late melting. The method is to dig holes vertically in the snow and bury the explosives, which heave the snow to create a level walking surface. For this work, ANFO (a blasting agent that is a mixture of ammonium nitrate and fuel oil) is used. An electrical initiation system is used to safely control the timing of the blast. Occasionally small amounts of explosives are used in other trail work to remove large rocks or reestablish trail corridors along rock faces. This is done in most cases by drilling holes and using small charges, which again limits noise and flyrock. Decibel levels for this type of explosive use are similar to other types of explosive use described in Table 4-5. The surroundings and the act of burying explosives could lower decibel levels depending on specific conditions. The types of explosives used for this work are emulsions ignited by an electrical initiation system for a safely controlled blast. Virtually all NPS blasting uses confined charges to minimize air blast as opposed to avalanche blasting which seeks to maximize air blast. The one exception is fireline explosives, which have occasionally been used. Fireline charges are laid along the ground to clear a fireline of brush and downfall for the purpose of containing a fire.

Forest Plan Standards

National Forest Plan Standards regarding water quality

The Flathead Forest Plan contains Forest-wide Management Direction that:

- Develop watershed activity schedules for key watersheds;
- Maintain an inventory of non-wilderness areas needing soil and water restoration;
- Complete restoration projects as funds permit; and
- Apply Best Management Practices (BMP's) during Forest Plan implementation to ensure that Forest water quality goals are met.

The Flathead Forest Plan, under Management Area Specific water and soils direction requires that the forest:

- Maintain long-term water quality to meet or exceed State water quality standards;
- Monitor surface-disturbing activities to ensure standards are met;
- Refer to Forest-wide standards under Water and Soils for Best Management Practices, Landtype Guidelines, and standards applicable to projects or activities within specific Management Areas;
- Analyze and evaluate all project proposals to determine the potential water quantity and quality impacts; and
- Develop mitigation measures to minimize adverse impacts.

Management area 12 is a riparian management emphasis area. The key goal for MA 12 is: "Manage riparian areas throughout the Forest to enhance vegetation and wildlife diversity

and maintain or enhance water quality and fisheries." The key water standard is: "Maintain long-term water quality to meet or exceed State water quality standards. To ensure meeting these standards, surface—disturbing activities will be monitored where this need is identified." Most of the Forest Service lands between the railroad and the Middle Fork (within the analysis area) occur in MA12. All of the alternatives, both no-action and action, should have no effect on the long-term water quality and meet the intent of the Forest Plan in this MA.

All proposed action alternatives meet the Clean Water Act, Montana State Water Quality Standards, National Park Service - Management Policies 2006, Forest Plan Standards, and Executive Order 11990.

PUBLIC INVOLVEMENT AND SCOPING FOR THE DRAFT EIS

The scoping period for the draft EIS was held from June 21 to July 22, 2005. A summary of the scoping period, participants, issues, and comments is described in Chapter 1 of this document. A list of recipients of the draft EIS is included in this section. The following list includes representative federal, state, and local entities. A list of private individuals is available and is on file in Glacier National Park.

RECIPIENTS OF DRAFT EIS

ELECTED OFFICIALS

Max Baucus, United States Senate Conrad Burns, United States Senate Dennis Rehberg, United States House of

Representatives

Brian Schweitzer, Governor State of

Montana

James Steele, Jr., Chair Confederated

Salish-Kootenai Council

Pat Thomas, Chair Blackfeet Tribal

Business Council

Flathead County Commissioners

Glacier County Commissioners

Mayor of Browning

Mayor of Kalispell and City Council

Mayor of Whitefish and City Council

Mayor of Columbia Falls and City Council

FEDERAL AGENCIES

Department of the Interior, Office of the Solicitor

NPS Intermountain Regional Office

Flathead National Forest

Lewis and Clark National Forest

US Army Corps of Engineers

US Environmental Protection Agency

US Fish and Wildlife Service

US Geological Survey

Advisory Council on Historic Preservation

Questa Ranger District

CANADIAN GOVERNMENT AGENCIES

Waterton Lakes National Park

Ralph Klein, Premier of Alberta Province

MONTANA STATE AGENCIES

Montana Department of Transportation Montana State Historic Preservation Office Montana State Department of Fish,

Wildlife, and Parks

Montana Department of Natural

Resources and Conservation

Montana Department of Environmental

Quality

Montana Environmental Quality Council

Stillwater State Forest

Flathead County Planning and Zoning

Board

Bigfork Library

ORGANIZATIONS AND BUSINESSES

National Parks and Conservation

Association

American Wildlands

Great Bear Foundation

Swan View Coalition

Friends of the Wild Swan

The Glacier Fund

Montana Wilderness Association

Glacier Natural History Association

Montana Preservation Alliance

National Wildlife Federation

The Nurturing Earth

Wilderness Watch

Backcountry Horseman

Glacier Waterton National Park Visitor

Association

Flathead Basin Commission

Parklines/NRDC

Burlington Northern Santa Fe Railway

Great Northern Environmental

Stewardship Area

Alliance of Backcountry Parachutists

Glacier Raft Company

Glacier Park Incorporated

Great Northern Whitewater Resort

Izaak Walton Inn

Montana Raft Company

Wild Rivers Adventures

LIST OF PREPARERS AND CONTRIBUTERS

Table 5-1. EIS preparation interagency team.

EIS INTER AGENCY TEAM				
Name/Title	Responsibilities	Education	Experience	
Wendy Hart Ross EIS Team Lead	NPS EIS Organization/ Compilation	BS Northern Studies /Biology	15 years	
Mary Riddle Cornell Environmental Protection and Compliance Specialist	NPS EIS Oversight and Review	BS Environmental Studies	21 years	
Michele Draggoo Planning Team Leader	USFS NEPA Coordination	BS Forest Management	17 years	
Stan Bones Avalanche Expert	USFS Avalanche Processes	BS Forest Management	35 years	
Dean Sirucek Hydrologist	USFS Hydrology and Soils	BS Plant & Soil Science, Post-grad studies Forest Ecology	30 years	
Tara Carolin	NPS Vegetation/ Soils	BS Botany & Range Science	14 years	
Ecologist		MS Wildlife & Rangeland Resources		
Pat Van Eimeren Fisheries Biologist	USFS Aquatic Resources	BS Fisheries Science MS Fisheries Science	20 years	
Bill Michels Aquatic Biologist	NPS Aquatic Resources, Air Quality	BS Park Administration	35 years	
Henry Rivera District Wildlife Biologist	USFS Wildlife	BS Wildlife Management	27 years	
John S. Waller Carnivore Ecologist	NPS Wildlife	BS Wildlife Biology MS Fish & Wildlife Management PhD Wildlife Biology	20 years	
Cory Davis Biological Compliance Technician	NPS Wildlife	BA Biology MS Biology	10 years	
Timothy Light USFS Archeologist	USFS Cultural Resources	BA Anthropology MA Anthropology	18 years	
Lon Johnson Historical Architect	NPS Cultural Resources	B. ARCH. Architecture	24 years	

Pat Thomas Landscape Architect	USFS Visual Resources	BS Architecture	30 years	
SOCIOECONOMIC CONTRACT				
John Duffield Adjunct Research Professor/Economics	University of Montana Socioeconomic Analysis	BA Economics PhD Economics	32 years	
Chris Neher Research Economist	University of Montana Socioeconomic Analysis	BA Business Management MA Economics	17 years	

Table 5-2. Individuals that contributed to or reviewed the EIS.

GLACIER NATIONAL PARK STAFF		
Name	Title	Duty
Mick Holm	Superintendent	EIS Review / Consultation
Stephanie Dubois	Assistant Superintendent	EIS Review/ Consultation
Rita Causby	Administrative Support Technician	EIS Organization/ Preparation
Pat Suddath	West Lakes District Ranger	SUP Preparation/ EIS Review
Kyle Johnson	Park Wilderness Manager	SUP Preparation/ EIS Review
Jack Potter	Chief of Science and Resource Management	EIS Review/ Consultation
Brace Hayden	External Issues Specialist	EIS Review/Consultation
Don Bachman	Volunteer in Parks/ Avalanche Specialist	EIS Review/ Consultation
Stephen Willis	Park Ranger	EIS Review/Consultation
FLATHEAD NATIONA	AL FOREST STAFF	
Jimmy DeHerrera	Flathead National Forest Supervisor	EIS Review
Doug Abromeit	Director, USFS National Avalanche Center	EIS Review/ Consultation
MONTANA DEPARTA	MENT OF TRANSPORTATION	
Sandra Straehl	Montana Department of Transportation Transportation Planning Administrator	EIS Review/ Consultation
Jim Skinner	Montana Department of Transportation Manager, Program & Policy Analysis Section Rail, Transit & Planning Division	EIS Review/ Consultation
Stephen Herzog	Montana Department of Transportation Kalispell Area Maintenance Engineer	EIS Review/ Consultation

US GEOLOGICAL SURVEY		
Blase Reardon	Science Technician	EIS Review/Consultation
NATIONAL PARK SERVICE NATURAL SOUNDS PROGRAM		
Frank Turina	NPS Natural Sounds Program	EIS Review/Consultation
Karen Trevino	NPS Natural Sounds Program	Consultation
NPS PEER REVIEW		
Steve Frye	Superintendent –Katmai National Park	EIS Peer Review / Consultation
Pete Hart	Acting Superintendent -Big Thicket National Preserve	EIS Peer Review / Consultation

Table 5-3. Individuals contacted for specific information related to the EIS.

BURLINGTON NORTHERN SANTA FE RAILROAD		
Mike Armstrong	BNSF Assistant Vice President and Chief Engineer	
Larry Woodley	BNSF General Director Maintenance/ Montana Division	
Lane Ross	BNSF Trainmaster	
Byron Burns	BNSF Engineer	
CHUGACH ADVENTURE GUIDES		
Dave Hamre	Chugach Adventure Guides Avalanche Specialist	
Ted Steiner	BNSF Avalanche Safety Director	
AVALANCHE PRODUCTS		
Kevin Chartier	Avalanche Sentry Systems/ Inter-Mountain Laboratories Inc.	
Ernie Scott	Avalanche Sentry Systems / Inter-Mountain Laboratories Inc.	
Andre Martin	Avalhex Systems/ Mountain Management	
Pierre Senabre	Avalhex Systems/ Mountain Management	
Oswald Graber	Avalanche Guard Systems	
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