

National Park Service
U.S. Department of the Interior



Glacier National Park
Montana

Roberts Cabin Removal

Environmental Assessment/Assessment of Effect

July/August 2007



Roberts Cabin 2007

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Environmental Assessment

Roberts Cabin Removal

Glacier National Park • Montana

SUMMARY

Edna Graham purchased the lot in Glacier Park Villa Sites on which the Roberts Cabin is located in 1949 and she constructed the cabin shortly thereafter. The cabin sits on the shore of Lake McDonald in Glacier National Park. Mary Agnes Roberts, Graham's daughter, sold the property to the National Park Service (NPS) in 1975, and received a 25- year lease agreement to permit use of the cabin by the family. The cabin was used seasonally by Mary Agnes Roberts' family under this 25- year lease until 2000 when the lease expired. Ms. Roberts sold the property to the federal government with a verbal understanding with then Superintendent Phil Iverson, that the building would be removed and the property restored to its natural state at the end of the 25- year lease. NPS policy at the time of acquisition was to remove non- historic structures in unique natural areas and restore these sites to a natural state. This policy was the justification for the cabin's acquisition in 1975. A determination of eligibility for listing in the National Register of Historic Places was completed in 2006. The Montana State Historic Preservation Office concurred in the park's determination that the cabin met the criteria for listing in the National Register of Historic Places as a building contributing to the significance of the Glacier Park Villa Sites Historic District.

In 2003, the park proposed that the building be demolished. At the time of the cabin's acquisition in 1975, the c. 1949 building fell well outside the National Register of Historic Places general rule, that properties must be at least 50 years before nomination. The NPS did not require the Roberts family to maintain the building at the end of their lease as the NPS planned to remove the building. The cabin is currently in poor condition and presents a human health and safety concern. Removal of the cabin would restore the natural state of the property, decrease development along the Lake McDonald shoreline, remove human health and safety concerns, and honor the verbal agreement between the park and the previous landowner. This Environmental Assessment/Assessment of Effect (EA/AEF) evaluates a no action and an action alternative. Park crews would remove the cabin. Resource topics evaluated in this document are historic structures, cultural landscapes, soils, vegetation, wildlife, threatened and endangered species, human health and safety, and visitor use and experience.

HOW TO COMMENT

Comments can be provided directly through the Park's planning website (<http://parkplanning.nps.gov/parkHome.cfm?parkId=61>) by selecting this project. Or write to: Superintendent, Glacier National Park, Attn: Roberts Cabin EA, West Glacier, Montana 59936. This EA/AEF will be on public review for 30 days. Before including your address, phone number, e- mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. We will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of or officials of organizations or businesses, available for public inspection in their entirety.

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INTRODUCTION

Background

Glacier National Park (Glacier or the park) is located on the Canadian border in the northwestern section of Montana. The park is in the northern Rockies, and contains the rugged mountains of the Continental Divide. Together with Canada's Waterton National Park, it forms the Waterton-Glacier International Peace Park, which is listed as a World Heritage Site and an International Biosphere Reserve. Outstanding natural and cultural resources are found in both parks.

Glacier National Park is an investment in the heritage of America. Its primary mission is the preservation of natural and cultural resources, ensuring that current and future generations have the opportunity to experience, enjoy, and understand the legacy of Waterton- Glacier International Peace Park.

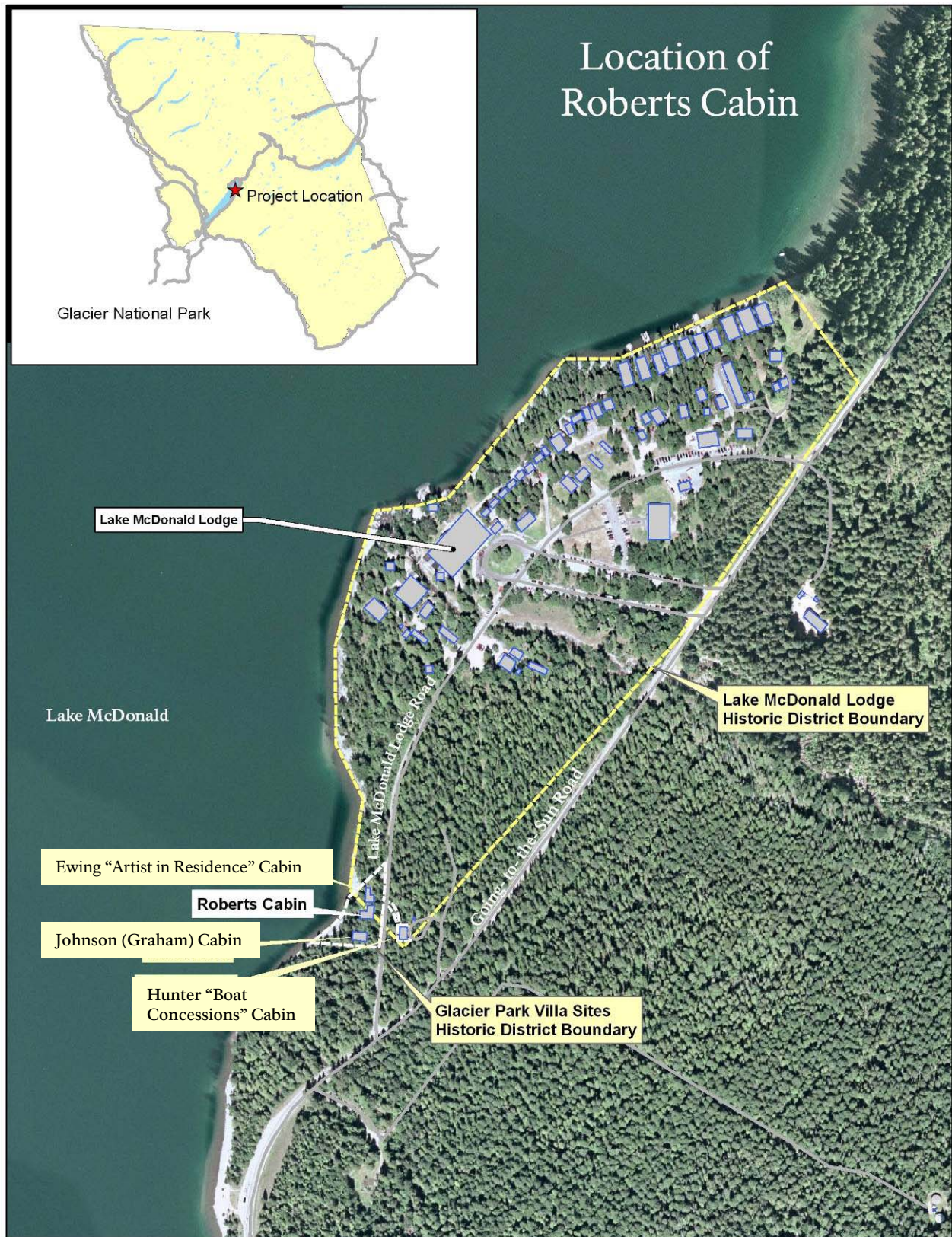
The purpose of Glacier National Park is to:

- preserve and protect natural and cultural resources unimpaired for future generations (1916 Organic Act);
- provide opportunities to experience, understand, appreciate, and enjoy Glacier National Park consistent with the preservation of resources in a state of nature (1910 legislation establishing Glacier National Park); and
- celebrate the on- going peace, friendship, and goodwill among nations, recognizing the need for cooperation in a world of shared resources (1932 International Peace Park legislation).

The significance of Glacier National Park is explained relative to its natural and cultural heritage:

- Glacier's scenery dramatically illustrates an exceptionally long geological history and the many geological processes associated with mountain building and glaciation;
- Glacier offers relatively- accessible, spectacular scenery and an increasingly rare primitive wilderness experience;
- Glacier is at the core of the "Crown of the Continent" ecosystem, one of the most ecologically intact areas remaining in the temperate regions of the world;
- Glacier's cultural resources chronicle the history of human activities (prehistoric people, Native Americans, early explorers, railroad development, and modern use and visitation) and show that people have long placed high value on the area's natural features; and
- Waterton- Glacier is the world's first international peace park.

Recreational camp properties were developed around Lake McDonald on six homesteads claimed between 1891 and 1895 and patented between 1905 and 1917. Access to the uninhabited wilderness area that was to become Glacier National Park was enabled by the Great Northern Railway and real estate interest was high as soon as settlers were able to cross the Continental Divide. Homesteading and tourist accommodations quickly developed in the most accessible areas. Resorts, hotels, camps, corrals, guide services, and real estate sales were fully established along the shore of Lake McDonald when Glacier National Park was established in 1910. Glacier Park Villa Sites was platted and dedicated on the southeast shore of Lake McDonald in 1916. The subdivision was a 42.5- acre parcel split into 738 very small lots. Most of the lots in the subdivision were not close to the lake and did not sell. Thirteen lots in the subdivision were on the lakeshore. Three cabins were built on the lakeshore lots and one was built on an interior lot.



Map 1. Roberts Cabin location on Lake McDonald.

All of the properties on the lakeshore and most of the interior lots have been transferred to federal ownership.

Edna Graham and then her daughter, Mary Agnes Roberts, owned the Roberts Cabin on tract number 08- 114 (See Map 1). The cabin was sold to the National Park Service (NPS) in 1975. Mary Agnes Roberts was granted a 25- year lease to use the cabin in return for receiving a lower purchase price. The family used the cabin seasonally under the 25- year lease. The lease ended in 2000 and the house was vacated. A small side addition and a deck were constructed at an unknown date. In 1975, park officials verbally agreed during acquisition to remove the cabin and return the property to its natural state after the 25- year lease ended. Mary Agnes Roberts maintained the cabin during the lease; however, towards the end of the lease, park officials did not require the family to complete capital improvements due to the anticipated removal. The NPS has not maintained the cabin since it was vacated and further deterioration has occurred. The cabin was built on concrete piers and the underside of the building is exposed to weathering and rot. The roofing and front deck are rotting and unsafe for human use.

The building was not historic in 1975 when the NPS acquired it. A determination of eligibility (DOE) for listing in the National Register of Historic Places was prepared for all recreational cabins on Lake McDonald in 2006. The Glacier Park Villa Sites Historic District, comprised of four cabins, was determined to be eligible for listing in the National Register of Historic Places. The Roberts Cabin was found to be a contributing resource of the Historic District. The following Photos 1- 10 show the interior and exterior of the Roberts Cabin.

Purpose and Need

The purpose of the Roberts Cabin removal project is to comply with the agreement made with the original landowner that the cabin would be removed after acquisition by the NPS and expiration of the 25- year lease. The Roberts Cabin would be removed to fulfill the following objectives.

- Honor the verbal agreement with the previous landowner to remove the cabin after the 25- year lease expired and restore the area to a natural state.
- Remove a public health and safety hazard and an attractive nuisance.
- Reduce visual impacts and development on the shoreline of Lake McDonald.
- Increase undeveloped, natural land for wildlife habitat on the lakeshore.

In 2003, the park Management Team proposed that the Roberts Cabin be demolished in accordance with the original acquisition agreement. The cabin was not historic when it was acquired and the NPS did not maintain the structure after the lease expired in 2000. The previous landowner frequently visits the park and regularly expresses concern that the cabin has not been removed in accordance with the purchase agreement. The *Tract Record and Valuation Data of Land to be Acquired* (NPS 1965) cited the justification for acquisition of the property as “N.P.S. policy and to eliminate from lake view.”

The vacant cabin has become a safety hazard and an attractive nuisance. The cabin is secure; however, it is not tightly sealed. Pests and wildlife have access to the exposed underside of the cabin. The inside of the cabin has several years’ accumulation of rodent droppings and the threat of rodent- borne disease exists. The flooring of the outside deck and stairs is rotting and may fail at any time. Constant exposure to the elements is weakening the roof and will eventually compromise the buildings structural integrity. Harmful building materials such as asbestos or lead paint may be present and would have to be mediated before rehabilitation or demolition.



Photo 1. Front of Roberts Cabin.



Photo 2. South side view of Roberts Cabin.

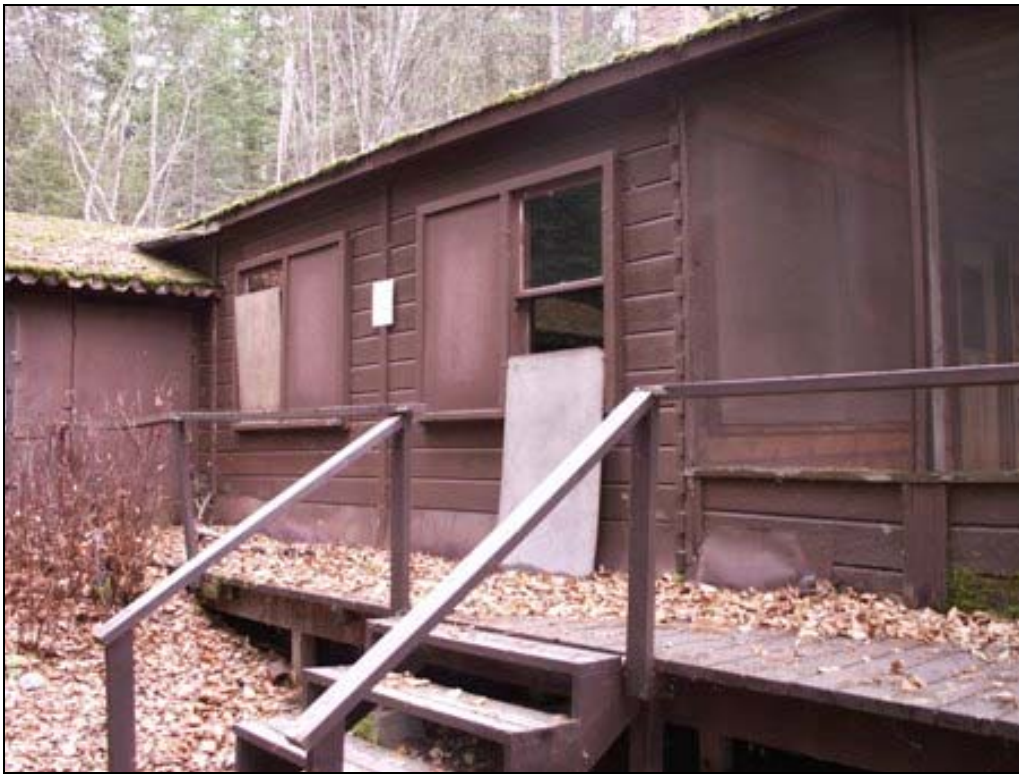


Photo 3. North side view of Roberts Cabin.



Photo 4. Back of Roberts Cabin with retaining wall.



Photo 5. Concrete pier supports under cabin.



Photo 6. Inside of Roberts Cabin- living room.



Photo 7. Inside of Roberts Cabin- living room windows.



Photo 8. Inside of Roberts Cabin- kitchen.



Photo 9. Artists in Residence Cabin (left) and Roberts Cabin (Right) from the lake.

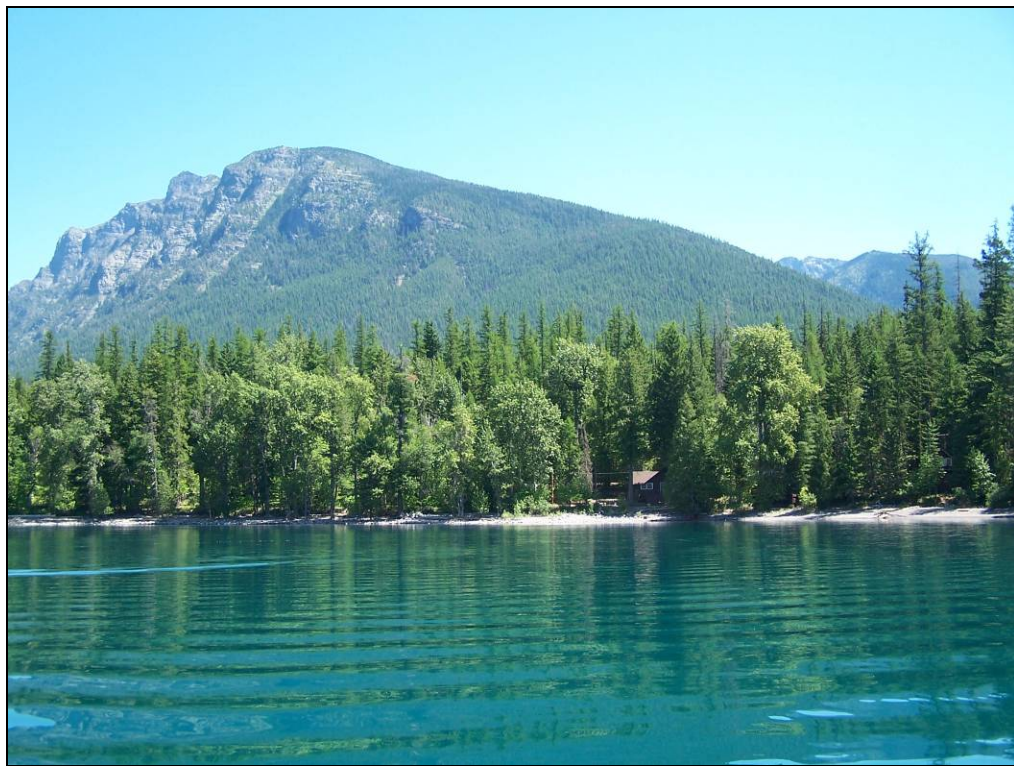


Photo 10. Glacier Park Villa Sites Historic District cabins on Lake McDonald lakeshore. Artist in Residence Cabin (left), Roberts Cabin (Middle), Graham Roberts Cabin (Right)

Scoping and Public Involvement

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in an environmental assessment. Glacier National Park conducted both internal scoping with appropriate National Park Service staff and external scoping with the public as well as interested and affected groups and agencies. Scoping resulted in defining the purpose and need for the project, identifying potential alternatives to address these needs, determining what the issues were and what resources would be affected and identifying the relationship, if any, of the proposed action to other planning efforts in the park.

The initial public scoping for this project included the removal of two other cabins in addition to the Roberts Cabin. Public scoping began with a press release and a mailed scoping letter on June 18, 2003. Scoping letters were sent to people on the park's environmental assessment mailing list. The mailing list included members of the public along with federal, state and tribal agencies. The scoping letter was also placed on Glacier's Internet site. The initial scoping period was completed July 17, 2003. Another scoping period was opened November 29, 2006 because two and a half years had passed since the first scoping period and the scope of the project had changed to the removal of only the Roberts Cabin. The second scoping period included an updated press release and a scoping letter. The second scoping period ended on December 29, 2006. This scoping effort was listed on the NPS public comment website.

In accordance with 36 CFR800.8(c), Glacier National Park also notified the Montana State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP) that it intended to prepare a combined Environmental Assessment/Finding of Effect (EA/AEF) for the proposed project.

Nine letters were received during the initial scoping. Five letters supported the removal of the Roberts cabin, one letter was in opposition to the Robert cabin removal, and one letter stated that it was premature to consider removal of the cabin without a DOE. The State Historic Preservation Office wrote acknowledging the beginning of consultation. One letter was received from a private business interested in removing the cabin.

The park received fifteen letters during the second scoping period. Ten of those letters were in support of the Roberts Cabin removal. One letter was in opposition to the cabin removal. The Blackfeet Tribe and the Backcountry Horseman of the Flathead both wrote saying they had no comments. One letter stated several issues that they would like to see addressed in the EA including the status of the National Register of Historic Places Multiple Property Documentation, the umbrella strategy that will drive the NPS disposition of lakeshore cabins, description of the Roberts Cabin preservation in the No Action alternative, mitigation of safety hazards, and a description of the cabins that are more representative of the Glacier Park Villa Sites subdivision than the Roberts Cabin. These comments are all addressed in this EA/AEF. At this time it is anticipated that one plan and environmental analysis will address the remaining Lake McDonald cabins. Circumstances or events may result in individual EA or EIS preparation for individual properties. One comment requested more information about the sale of the building for relocation. This EA/AEF has dismissed the removal of the cabin by salvage contract. At this time, public meetings are not anticipated for this project.

Relationship of the Proposed Action to Other Planning Efforts

The Roberts Cabin and tract 08- 114 have not been specifically addressed in park planning documents. General objectives for properties in the Lake McDonald area are discussed in the park's General Management Plan (1998). The plan states:

The road and Lake McDonald Lodge would be managed as historic resources in keeping with their national landmark status. Other properties would be managed to preserve their historic values.

IMPACT TOPICS

Issues and concerns affecting the proposed action were identified by specialists in the National Park Service, other federal and state agencies, and the public. Impact topics are the resources that could be affected by the range of alternatives analyzed. Specific impact topics were developed to ensure that potential impacts of alternatives would be compared consistently. The following impact topics were identified based on federal laws, regulations, orders, and National Park Service *Management Policies*, 2006, and input from the Montana State Historic Preservation Officer. A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissing other impact topics from further consideration

Impact Topics Selected for Detailed Study

Historic Structures and Cultural Landscapes

The NPS maintains historic structures and cultural landscapes based on sound preservation practices to ensure their long-term protection. The Roberts Cabin is a building contributing to the significance of the Glacier Park Villa Sites Historic District. The Glacier Park Villa Sites Historic District partially overlaps the Lake McDonald Historic District. Two of the four buildings in the Glacier Park Villa Sites Historic District (not the Roberts Cabin) also contribute to the significance of the Lake McDonald Historic District. The removal of the Roberts Cabin would impact the historic, architectural, and cultural landscape characteristics of the two historic districts. The impacts on the historic districts and cultural landscape are analyzed in this document.

Soils

The NPS preserves the soil resources of parks and protects those resources by preventing unnatural erosion, physical removal, or contamination (NPS 2006). Soil disturbance would likely occur with the proposed cabin removal and site restoration activities. The proposed removal of the Roberts Cabin and subsequent natural landscape restoration efforts could impact soil resources in the project area near the shore of Lake McDonald.

Vegetation

The NPS strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of plants (NPS 2006). The proposed removal of the Roberts Cabin and subsequent natural landscape restoration efforts could impact vegetation resources in the project area near the shore of Lake McDonald. There would be potential temporary vegetation disturbance during demolition and potential for increased establishment of exotic species, while follow-up restoration could increase the presence of native plants within the project area.

Wildlife

The NPS is charged with maintaining native wildlife as an integral component of natural ecosystems. The cabin removal would occur during the shoulder season in September. Site restoration would occur during the shoulder seasons from September through October and in the following spring months. Two adjacent cabins are occupied seasonally during the summer. This area has a moderate amount of human use on the lake and shore during the summer months, however, human use of the lakeshore and Lake McDonald Lodge road are reduced during the shoulder seasons. While wildlife may not be in the immediate vicinity of the cabin, noise and disturbance from the cabin removal may disturb nearby wildlife. The cabin has become potential habitat for bats, birds, and rodents. Cabin removal and site restoration could affect wildlife movements and patterns in the area.

Threatened and Endangered Species and Species of Concern

The NPS protects and attempts to recover all native species that are listed under the Endangered Species Act of 1973. Both the Management Policies (2006) and Director's Order 77 (*Natural*

Resources Management Guidelines) require the NPS to examine and minimize the impacts of projects on federal candidate species as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species. Bald eagles are the federally listed species that may be impacted in the project area. There is habitat that may support several sensitive species at the project site. The impacts of the project on these species are analyzed in this document.

Human Health and Safety

The NPS Management Policies (2006) state that safety and health of all people are core Service values. Public health is addressed in Director's Order 83 *Public Health and Vector-borne and Zoonotic Disease* and employee health is addressed in Director's Order 50B *Occupational Health and Safety Program*. These policies address risk recognition and early prevention for a safe work and recreational environment. The NPS is committed to eliminating and reducing health and safety risks when they are identified. The Roberts Cabin has years' accumulations of rodent droppings and hantavirus is a concern. Further safety issues will develop with the deterioration of the structure and surrounding features. As an empty structure, the building is an attractive nuisance that may present a safety hazard to curious people exploring the site.

Visitor Use and Experience

Lake McDonald is a popular visitor destination in the Park. Many visitors use the lake and lakeshore. Visitor experience would be affected by removal of the Robert's Cabin. The scenic qualities of the lake and shore would be changed with cabin removal from the lakeshore. Visitor perception of the lakeshore, surrounding scenery, and historic resources would change with the cabin removal.

Impact Topics Eliminated from Detailed Study

The rationale for dismissing specific topics from further consideration is given below.

Air Quality

The Clean Air Act provides for special protection of air quality and air resources in all National Park Service units. Section 118 of the Clean Air Act requires parks to meet all federal, state, and local air pollution standards. Glacier is classified as a mandatory Class I area under the Clean Air Act, where emissions of particulate matter and sulfur dioxide are to be restricted. Air quality is considered good in Glacier National Park. There are no metropolitan areas within 125 miles of the park, and no regional smog typical of highly populated areas with a high amount of vehicle traffic. Removal of the cabin would result in a small amount of dust and emissions production, but the amount would not be measurable and the level of impact would be temporary and negligible.

Water Quality

NPS policies require protection of water quality in accordance with the Clean Water Act. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The US Army Corps of Engineers (USACE) has been charged with evaluating federal actions that result in potential degradation of waters of the United States and issuing permits for actions consistent with the Clean Water Act. The US Environmental Protection Agency also has responsibility for oversight and review of permits and actions, which affect waters of the United States.

There are no surface waters in the cabin area except Lake McDonald. The cabin site is dry except for periodic runoff during storm events. The cabin removal would not affect water quality or water quantity on Lake McDonald. The lake would be at its seasonal low level in September and best management practices (BMP's) (Appendix A) would be used to eliminate sediment or soil movement into the lake. Impacts to water quality would be negligible; therefore, the impact topic has been dismissed.

Threatened and Endangered Species and Species of Concern

Gray Wolf. There is no evidence of recent wolf activity in the area and the area is not considered primary wolf habitat because there is a limited prey base for wolves. There are currently no known den or rendezvous sites near the project area. Noise created during demolition could temporarily displace a wolf from the area if it was present, but **no effects** on wolves are anticipated.

Canada Lynx. No surveys have been conducted in the immediate project area, and there are no incidental sightings or track records in the general area. A preliminary map of lynx habitat in the park defined moist conifer forest above 4,000 feet elevation as the most likely areas supporting lynx. Little is known about lynx habitat use in the park and these criteria are general in nature. However, because the project site is more than a mile from an area above 4,000 feet elevation, these criteria suggest the area may not provide suitable lynx habitat. The amount of development and human presence in the area also makes it unlikely that lynx frequent the area. **No effects** on lynx are anticipated.

Grizzly Bear. Glacier National Park was placed into grizzly bear management “situations” in accordance with the Grizzly Bear Recovery Plan (USFWS 1993). Over 1 million acres of the park (proposed wilderness) are established as Management Situation 1, in which management decisions would favor the needs of the grizzly bear when grizzly habitat and other land- use values compete, and grizzly- human conflicts would be resolved in favor of grizzlies, unless a bear is determined to be a nuisance. The remainder of the park, which is developed front-country, is established as Management Situation 3, in which grizzly habitat maintenance and improvement are not the highest management considerations, grizzly bear presence would be actively discouraged, and any grizzly involved in a grizzly- human conflict would be controlled. The project location is within Management Situation 3. Grizzly bears are discouraged from using the Lake McDonald Lodge developed area and consequently are usually not observed in the area. Work would occur during the day when bears are less active and nighttime bear movements should not be affected. No new bear attractants would be present, as the demolition site would be properly maintained (Appendix A). **No effects** on grizzly bears from the proposed action are expected.

Bull Trout. Bull trout are located within Lake McDonald and spawn in Lower McDonald Creek. The proposed demolition is not expected to impact bull trout or their habitat as the work would occur above the waterline. Some runoff sediment from the removal and restoration site could reach Lake McDonald but the amount would not be substantial enough to cause any changes to local water quality. The revegetation of the site would reduce the amount of expected erosion from surface water. The use of BMP's (Appendix A) would further reduce the potential for any water quality impacts. **No effect** on bull trout is expected from the proposed action.

Species of Concern. The proposed action is not expected to have any impact on the following sensitive species as they have not been documented in the project area or no impacts on these species are anticipated. Wolverines (*Gulo gulo*) are wide- ranging carnivores that may pass through the area in search of carrion, and probably make only temporary and sporadic use of the area; it is unlikely that denning habitat is near the project site because of the large amount of human presence. Fisher (*Martes pennanti*) also likely make only temporary and sporadic use of the area, though little is known about the distribution and movements of either of these elusive carnivores. Harlequin ducks (*Histrionicus histrionicus*) may use streams near the site during the breeding season from May to September, and have been observed on the lake near the cabin during April and May. The proposed action would not occur until September when harlequin ducks would be absent from the project area. The project area is not typical of either Ruffed grouse (*Bonasa umbellus*) or spruce grouse (*Falcipennis canadensis*) habitat. The calliope hummingbird (*Stellula calliope*) may occur during the summer nesting season in riparian areas near the project, but would be far enough from the project area that there would be no impact

on the species. The westslope cutthroat trout (*Oncorhynchus clarki lewisi*) is found in Lake McDonald, but water quality would not be impacted and there would be no impact on this species.

Wetlands

The definition of wetlands under the Clean Water Act is “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” Executive Order 11990 *Protection of Wetlands* requires federal agencies to avoid, where possible, adversely impacting wetlands. Further, Section 404 of the Clean Water Act authorizes the USACE to prohibit or regulate the discharge of dredged material, fill material, or excavation within US waters. NPS policies for wetlands as stated in 2006 *Management Policies* and Director’s Orders 77- 1 *Wetlands Protection* strive to prevent the loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. In accordance with DO 77- 1, the potential adverse impacts of proposed actions must be addressed in a separate Statement of Findings document. No wetlands are located in the project area; therefore, a Statement of Findings will not be prepared. The impact topic of wetlands has been dismissed.

Floodplains

Executive Order 11988 *Floodplain Management* requires all federal agencies to avoid construction within the 100- year floodplain unless no other practicable alternative exists. The NPS is guided by the 2006 *Management Policies* and Director’s Order 77- 2 *Floodplain Management*. The service will strive to preserve floodplain values and minimize hazardous floodplain conditions. According to Director’s Order 77- 2, the impacts of proposed actions within the 100- year floodplain must be addressed in a separate Statement of Findings document. The cabin is not located in a 100- year floodplain. The topic of floodplains has been dismissed and a Statement of Findings is not necessary.

Natural Soundscapes

The NPS 2006 *Management Policies* state that the service will preserve the natural soundscapes of parks. Natural soundscapes are defined as the variety of natural sounds comprising an ecosystem including the physical capacity for transmitting those natural sounds and the interrelationships among park natural sounds of different frequencies and volumes. The degradation of natural soundscapes by impacts from human activities will be minimized or eliminated where possible.

The proposed cabin removal would introduce intermittent, human- caused noise into the project area for a temporary length of time. The noise would be made up of large machinery use, banging sounds, and general human activity. The natural soundscape would only be temporarily interrupted by the noise of cabin removal. The noise would only occur during cabin destruction and removal. This noise would not change the natural soundscape and would have a negligible, short- term impact on natural soundscapes.

Archeological Resources

Section 106 of the National Historic Preservation Act, as amended in 1992 (16 USC 470 et seq.), Director’s Order 28 *Cultural Resource Management Guidelines*, and the 2006 NPS *Management Policies* require the consideration of impacts on historic properties that are listed in or eligible for listing in the National Register of Historic Places. In addition, Director’s Order 28B *Archeology*, affirms a long- term commitment to the appropriate investigation, documentation, preservation, interpretation, and protection of archeological resources in national park areas.

The Lake McDonald Lodge area has been surveyed for archeological sites a number of times over the years, including Mark R. Guthrie (1978), Ann M. Johnson (1985), and Brian Reeves (1996). No archeological resources have been identified during the surveys. The project does not

involve digging or soil disturbance in known archeological sites. If archeological resources are identified during implementation, consultation will occur in accordance with federal legislation and regulations and National Park Service policy. This topic was dismissed from further analysis because the likelihood of archeological resources being affected is less than negligible.

Ethnographic Resources

Director's Order 28 *Cultural Resource Management* defines ethnographic resources as any site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. DO- 28 and Executive Order 13007 *Indian Sacred Sites*, charge the NPS with the preservation and protection of ethnographic resources.

No ethnographic resources have been identified by the Confederated Salish and Kootenai Tribes or the Blackfeet Tribal Business Council in the Glacier Park Villa Sites Historic District area, and no concerns were raised during scoping for this project. However, Glacier National Park recognizes that the tribes hold a body of knowledge that may result in the identification of ethnographic resources in the area in the future. If ethnographic resources are identified, consultation will occur in accordance with federal legislation and regulations and National Park Service policy. This topic was dismissed from further analysis.

Museum Collections

According to the NPS Management Policies (2006) Director's Order 24, *Museum Collections*, the NPS requires consideration of impacts on museum collections (historic artifacts, natural specimens, and archival and manuscript materials). NPS policy defines museum collections management including policy, guidance, standards, and requirements for preservation, protection, documentation, access, and use. No park museum collections items are stored or exhibited at the Roberts Cabin or the Glacier Park Villa Sites Historic District and no resources are anticipated that would become museum collections. Therefore, museum collections were dismissed from further analysis.

Park Operations

Changes in park staffing or long- term post- project maintenance are not expected with the temporary cabin removal project. Removal of one building would lessen the burden on future park operations, but the impact would be negligible. Park operations were dismissed from further analysis.

Prime and Unique Farmlands

The Farmland Protection Policy Act of 1981, as amended, requires federal agencies to consider adverse effects to prime and unique farmlands that would result in the conversion of these lands to non- agriculture uses. The Council on Environmental Quality (CEQ) directed that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as prime or unique. Prime or unique farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to NRCS (2003), the project area does not contain soils that are classified as prime and unique farmlands. Therefore, the topic of prime and unique farmlands was dismissed from further analysis.

Socioeconomic Environment

The proposed action would neither change local and regional land use nor affect local businesses or other agencies. Therefore, socioeconomic environment was dismissed from further analysis.

Environmental Justice

Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low- Income Populations* requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low- income populations and communities. The proposed action would not have disproportionate health or environmental effects on minorities or low- income populations or communities as defined in the Environmental Protection Agency's Environmental Justice Guidance (1998). Therefore, environmental justice was dismissed from further analysis.

ALTERNATIVES

No Action Alternative

Under the No Action Alternative, the NPS would not carry out regular maintenance, improvements, or repairs on the Roberts Cabin. The cabin would be allowed to deteriorate naturally. The deck off the lakeshore side of the cabin would be removed as it currently poses a human health and safety risk. The cabin would be secured with sealed doors and windows to prevent humans or pests from entering the building. The cabin would remain in this state into the foreseeable future. It is anticipated that health and safety issues that develop with the building would be addressed and mitigated.

Estimated costs of the No Action alternative are \$5,000 for the removal of the deck and stairs. Estimated costs for future safety mitigation are unknown.

Action Alternative: Remove Roberts Cabin (Preferred Alternative)

The Roberts Cabin would be completely removed from its current location. All peripheral evidence of the cabin would be removed including electrical wires, gas lines, propane tank, rock lined walkways, cement blocks, retaining walls, and non- natural materials. If appropriate, materials that could be salvaged would be re- used in the park or offered for sale by government auction. The site would then be returned to its natural state using native plants and materials.

Park crews would take up to four weeks to remove the cabin. The cabin would be removed in September after Labor Day to reduce impacts on visitors and wildlife. The road to the Roberts Cabin would be temporarily closed during the removal operation. The existing road is sufficient to stage removal equipment, dumpsters, and dump trucks. The two retaining walls behind the cabin would be removed and recontoured with an excavator. This disturbed area would provide access for the excavator, which would begin removal at the back of the cabin and work towards the front of the cabin. All work would be done within ten feet of the existing building perimeter wall footprint. Access to demolish the building would be required around the northeast side from the parking area that is outside the building perimeter. All building material and associated remains would be removed and taken to an appropriate landfill. Hazardous materials would be disposed of in accordance with federal and state laws.

Site Restoration

Four dead trees located close to the cabin would be removed to provide better access to the structure and to provide a safe environment for removal crews. Four maple tree clumps would be cut back for access and left in place to sprout after the recontouring of the slope. The two concrete retaining walls behind the cabin would be removed and the slope recontoured for access to the cabin. After cabin removal, the park's revegetation staff would revegetate the site and return the disturbed area to a natural state. The area would be surveyed for non- native plant species prior to disturbance and these populations will be treated according to species and abundance requirements. Following cabin removal and revegetation, a second treatment will be implemented if necessary. Removal of the concrete retaining walls and regarding to access the cabin with equipment would result in soil disturbance. Topsoil would be removed and

stockpiled prior to implementation of this work and the compacted area would be scarified prior to restoration of the salvaged topsoil after cabin removal is complete. Utility line removal areas would be filled in and returned to a natural slope. Seed and native plant cuttings would be collected from the site and planted. The soil would be assessed and organic material would be used to augment the soil for needed nutrients. Larger shrubs and trees would be planted to naturally screen the site and make it visually blend into the rest of the lakeshore. The site would be signed to reduce disturbance of the site while native plants become established. The revegetation staff would continue to monitor the site for non- native plant removal and native plant success.

Table 1. Cabin Removal Estimated Costs.

Item	Unit	Quantity	Unit Cost	Total
Operator	Payperiod	1	\$3,000	\$3,000
Truck Drivers 3 Drivers/1 week	Payperiod	2	\$2,000	\$4,000
Laborers	Payperiod	2	\$1,500	\$3,000
Landfill Charge (50lb/cf x 10cy/load)	Ton	270	\$38	\$10,260
Fuel (40 trips x 60 mile/trip/7mpg)	Gallon	342	\$3.00	\$1,026
Contingency 15%				\$3,000
Revegetation/Restoration				\$4,000
Section 106 Mitigation Costs (Exhibit signs and large scale photos)				\$3,000
Total				\$31,286

Mitigation Measures

The following mitigation measures have been developed to minimize the degree and/or severity of adverse impacts and to mitigate the adverse effects.

- The cabin removal would be completed in September to reduce impacts to visitors and wildlife.
- Best Management Practices (BMP's) have been developed for Glacier National Park. These mitigation practices are included in appendix A and would be used in the cabin removal and site restoration actions.
- A comprehensive risk management plan would be developed to reduce the risk of rodent- borne disease and other safety hazards present while removal of the cabin occurs.

Section 106 of the National Historic Preservation Act requires that the park consult with the Montana State Historic Preservation Office (SHPO) to seek ways to avoid, minimize or mitigate the adverse effect. The park and the SHPO have reached a preliminary agreement upon the following measures as a basis for a Memorandum of Agreement (Appendix B) to mitigate the adverse effect:

- The park would document the cabin to the standards of the Historic American Building Survey. The documentation would be placed in the park archives, and other repositories as required.
- The historic Ewing (Artist- in- Residence) cabin would be painted and deteriorated

rotting sill logs replaced.

- An interpretive wayside exhibit highlighting Lake McDonald recreational cabins and their historic importance to Glacier would be erected in a visitor use location on the lake as off- site mitigation.

The Memorandum of Agreement will be executed after considering any views provided by the public during review of this EA. The executed Memorandum of Agreement must also be submitted to the Advisory Council on Historic Preservation prior to approving the project.

Table 2. Alternatives summary and extent to which each alternative meets project objectives.

Objectives	No Action Alternative	Remove Roberts Cabin Preferred Alternative
Honor the verbal agreement with the previous landowner.	The verbal agreement to remove the cabin would not be honored.	The verbal agreement to remove the cabin would be honored.
Restore the cabin site to its natural state.	The cabin site would remain developed and not be returned to a natural state.	The site would be returned to a natural state.
Remove a health and safety hazard and attractive nuisance.	The rotting deck and stairs would be removed, eliminating the immediate exterior safety concerns. When the cabin deteriorates further, safety and health concerns would continue to develop. Uncovered health hazards such as asbestos and lead paint may emerge as the building deteriorates. Further actions would be needed to remove future health and safety hazards.	Removal of all of the cabin materials would effectively remove the health and safety hazards from the analysis area. A plan for risk identification and management would address safety issues of cabin removal.
Reduce visual impacts and development on the shoreline of Lake McDonald.	The cabin would remain on the lakeshore and would be visible from the lake and the road above the cabin.	The removal of the cabin would reduce the number of cabins to two along this stretch of lakeshore. The shoreline in this area would have less human development visible from the road and the lake.
Increase undeveloped, natural land for wildlife habitat.	The cabin would remain and the area would not be returned to natural land for wildlife use.	The cabin removal and site restoration would remove human development and restore the site for wildlife habitat.

Alternatives Considered But Eliminated from Further Study

Roberts Cabin Rehabilitation and Future Use

Rehabilitation of the Roberts Cabin is an alternative that was considered. The Roberts Cabin could be rehabilitated by the NPS and used for employee seasonal housing; however, this would

be extremely expensive. The rehabilitation cost estimate for the building is \$243,397 (2006 estimate). The detailed estimate is below in Table 1- 2. The building could only be used during the summer months for summer employees as it is not insulated and the surrounding area is only suited to seasonal housing. The NPS would charge approximately \$500 a month for seasonal rental of the building based on the Consumer Price Index (CPI) of rental costs by locality. A total of \$2000 per year, gained from seasonal rental, would not be enough revenue to maintain the building annually or cover the costs of rehabilitation.

Table 3. Rehabilitation of Roberts Cabin Estimate (2006 costs)

Item #	Description	Quantity	Unit	Cost/Unit	Total
1.	Selective demolition	1634	SF	\$10.00	\$16,340
2.	Install cement foundation	1634	SF	\$40.34	\$65,916
3.	Install new roof	1960	SF	\$5.93	\$11,623
4.	Re- wire house ¹	1634	SF	\$6.12	\$10,000
5.	Re- plumb house ²	1634	SF	\$2.44	\$3,987
6.	Interior Finishes- allowance	1	LS	\$5,000	\$5,000
Subtotal Direct Construction Costs					\$112,865
Published Location Factor (12 Percent)					\$0
Remoteness Factor (120 miles)					\$13,544
Federal Wage Rate Factor (6 Percent)					\$2,709
Design Contingency (15 Percent)					\$16,930
Total Direct Construction Costs					\$146,048
Standard General Conditions (18 Percent)					\$26,289
Government General Conditions (10 Percent)					\$14,605
Historic Preservation Factor (N/A)					\$0
Subtotal NET Construction Cost					\$186,941
Overhead (10 Percent)					\$18,694
Profit (10 Percent)					\$18,694
Estimated NET Construction Cost					\$224,329
Contracting Method Adjustment (Sole Source)					\$11,216
Inflation Escalation (7 Months)					\$7,852
Total Estimated NET Cost of Construction					\$243,397

¹ Data from www.mortgage-investment.com

² Data from www.theplumber.com

The National Park Service assesses properties and their costs over time using a standardized method of structure prioritization for operations and maintenance. The asset priority index (API) assesses the importance of the structure in serving the park mission. The facility condition index (FCI) indicates the condition of the structure. These indices allow park structures to be compared on a priority and condition basis. Buildings are given a value based on condition and importance of the structure to the mission of the park. The values are generated from a series of

building- specific questions answered during a site inspection and assessment. Buildings that fall in the range of an FCI of .50 or greater and an API of less than 21 are marked for disposal (see Figures 1 and 2). Buildings with values demonstrating that a building is not important to the park mission and that are in poor condition are unlikely to receive additional funding from the NPS federal maintenance fund. The Roberts Cabin API is 7 and the FCI is 0.54 marking it as a candidate for disposal.

Figure 1. Conceptual Diagram of Operations and Maintenance Prioritization

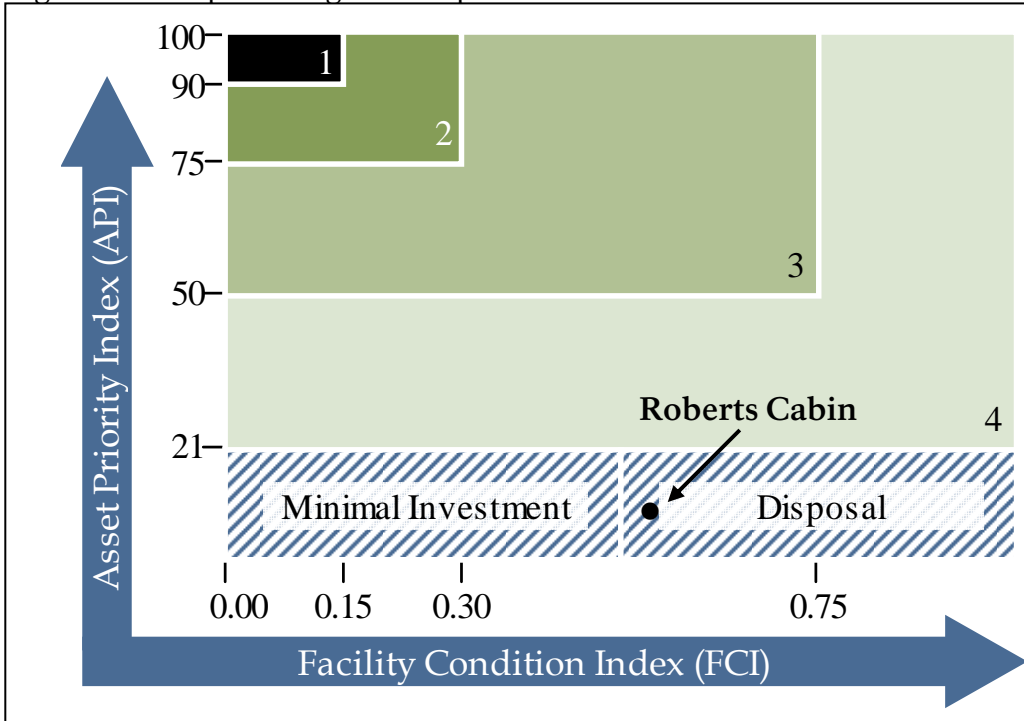
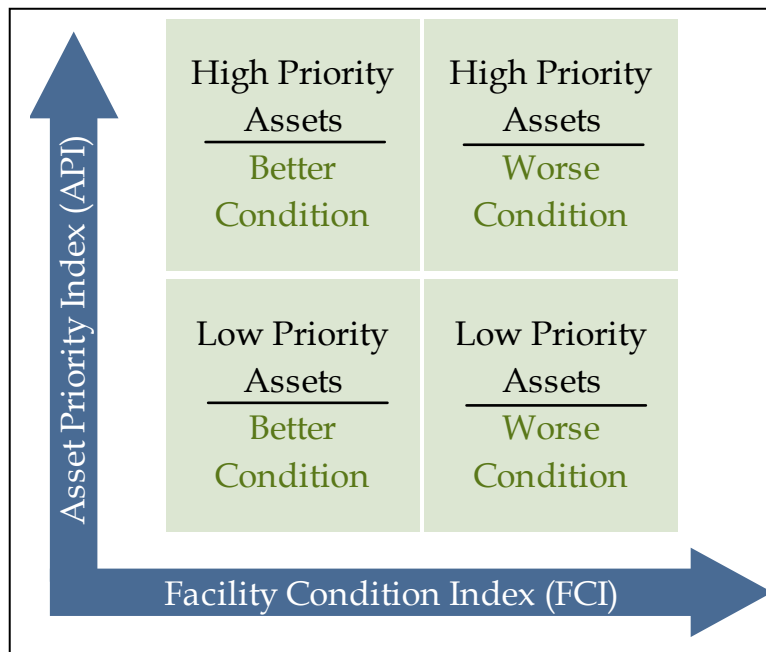


Figure 2. API/FCI Quadrant Chart



While the Roberts cabin was determined eligible for listing in the National Register of Historic

Places in 2006 as a contributing element of the Glacier Park Villa Sites Historic District, the cabin was acquired by the NPS in 1975 to be removed. NPS policies in the early 1970s clearly stated that private lands and structures be acquired by the service for removal and the properties returned to a natural state. The *Tract Record and Valuation Data of Land to be Acquired* record states in the justification for acquisition “NPS policy and to eliminate from lakeshore view”. Upon acquisition, the landowner was given verbal assurance that the cabin would be removed according to NPS policy as soon as the 25- year lease was over in 2000. Rehabilitating the structure does not fulfill the original objective of cabin removal and does not fulfill the agreement with the original landowner upon acquisition.

The park management staff decided not to include the Roberts Cabin as a possibility for concessionaire housing in the *Commercial Services Plan*, as the cost of rehabilitation would have to be borne by Glacier Park Incorporated (GPI). If GPI were to pay for rehabilitating the structure, they would gain possessory interest in the property, in effect owning a percent of the structure.

Burn Roberts Cabin

This method of removal would involve using the cabin for a structural burning exercise by NPS and other federal agency firefighters. Park staff raised concern that the Roberts Cabin may contain hazardous materials such as lead paint and/or asbestos. This safety issue led the management staff to dismiss burning the cabin as an alternative.

Remove Roberts Cabin by Salvage Contract

The park has work crews that are able to complete the work this fiscal year. The park has determined in the interest of time, internal removal would be most efficient. Furthermore, internal removal would have less environmental impact on the site. Useable parts of the cabin would be salvaged where possible and used in other park buildings.

Environmentally Preferred Alternative

The Council on Environmental Quality defines the environmentally preferred alternative as “...the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act’s §101.” Section 101 of the National Environmental Policy Act states that “... it is the continuing responsibility of the Federal Government to ...

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
- (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

The No Action Alternative without provision for future preservation does not fulfill the evaluation criteria. The historic building would not be maintained or restored for successive generations (Criteria 1). In its current state, the building does not meet human health and safety

standards (Criteria 2). Health and safety issues are expected to increase as the building deteriorates. Leaving the Roberts Cabin in its current state is not a beneficial use of the site as it poses an attractive nuisance and safety risk (Criteria 3). The No Action Alternative would not preserve this historic aspect of our national heritage as the building would not be maintained or used for any park purpose and it would remain a distraction from the natural lakeshore setting as it deteriorates (Criteria 4). The No Action alternative would not achieve a balance between population and resource use or permit high standards of living because it is not preserved and maintained as a cultural resource (Criteria 5). Leaving the Roberts Cabin in its current condition does not enhance the quality of renewable resources or approach the maximum attainable recycling of depletable resources (Criteria 6).

The Action Alternative decreases development and improves natural lakeshore and mountain views for visitors in succeeding generations (Criteria 1). Safety and health concerns with the cabin would be eliminated and the site restored to its natural state providing safe, healthful, productive, and aesthetically pleasing surroundings (Criteria 2, 3). The funds that would be spent on removing the deck and exterior safety hazards would be used to maintain the adjacent, historic Artist in Residence cabin improving the aesthetics and cultural surroundings of another historic lakeshore cabin (Criteria 2). Removal of the Roberts Cabin would achieve the widest range of beneficial uses of the environment by increasing lakeshore wildlife habitat and removing development from the lakeshore (Criteria 3). The Action Alternative removes an historic structure and does not achieve an environment that supports diversity or a variety of individual choice (Criteria 4). An interpretive panel about recreational cabins on Lake McDonald would provide mitigation for the removal of an historic structure and interpret recreational cabins to the visiting public so they would better understand the importance and context of historic private properties in Glacier (Criteria 4). The Preferred Alternative achieves a balance between population and resource use or permit high standards of living as human development is being removed and the site would be returned to its natural state (Criteria 5). Parts of the Roberts Cabin would be salvaged for use in other park construction projects and areas, while this action would achieve some recycling of depletable resources, it does not achieve the maximum recycling of these resources (Criteria 6). The Preferred Alternative is the Environmentally Preferred Alternative.

Table 3: Summary Comparison of Impacts

Impact Topic	No Action Alternative	Preferred Alternative
Historic Structures, and Cultural Landscapes	Leaving the cabin to deteriorate would result in demolition by neglect, impacting a contributing element of the historic district and the cultural landscape. There would be a minor, long- term, site- specific, adverse impact to the Roberts Cabin. There would be a moderate, long- term, site- specific, adverse impact to the Glacier Park Villa Sites Historic District and a minor, long-term, site- specific, and adverse impact on the cultural landscapes of the Glacier Park Villa Sites Historic District, Lake McDonald Lodge Historic District, and the other recreational camps on Lake McDonald.	Removal of the Roberts Cabin would remove a contributing element of the historic district and the cultural landscape. There would be a moderate, long- term, site- specific, adverse impact on the Glacier Park Villa Sites Historic District. There would be a minor, long- term, site- specific, adverse impact on the cultural landscapes of the Glacier Park Villa Sites Historic District, Lake McDonald Lodge Historic District, and the other recreational camps on Lake McDonald.

Impact Topic	No Action Alternative	Preferred Alternative
Soils	There would be no effect on soils.	Removal of the retaining walls, natural slope restoration, site scarification, and soil augmentation for revegetation would have a minor, site- specific, short- term, adverse impact to soils initially resulting in a minor, site- specific, long term, beneficial impact.
Vegetation	There would be no effect on vegetation.	The soil scarification, augmentation, and revegetation of the disturbed site would have a minor, site- specific, long- term, beneficial impact on vegetation.
Wildlife	There would be a negligible, short- term, site- specific, adverse impact on wildlife with the deck removal.	There would be a minor, short- term, site- specific, adverse impact on wildlife in or around the cabin during the removal of the building. After cabin removal, there would be a long- term, negligible, site- specific, beneficial impact on wildlife as there would be less human development and more naturally vegetated lakeshore available for wildlife use.
Threatened, Endangered, and Special Status Species	There would be a short- term, negligible, site- specific, adverse impact on eagles and other sensitive species in the project area with the deck removal.	The cabin removal would have a short- term, negligible, adverse impact on bald eagles and other sensitive species as noise, disturbance, and human activity may affect behavior or movement patterns. After the cabin is removed, there would be a negligible, long- term, site- specific, beneficial impact from site restoration.
Visitor Use and Experience	The cabin remaining along the lakeshore and deteriorating would have a long- term, negligible, site- specific, adverse impact on visitor use and experience.	The cabin removal activity would have a short- term, minor, site- specific adverse impact on visitor use and experience. After the cabin is removed, the impact on visitor use and experience would be minor, long- term, site- specific and adverse or beneficial depending on a visitor's desire to see historic buildings in the area.
Human Health and Safety	The cabin poses on- going safety risks with deterioration. Health and safety risks are expected to increase as the cabin deteriorates. The impact on health and safety would be minor, long- term, site- specific, and adverse.	The removal activity of the cabin would have a minor, short- term, site- specific, adverse impact on human health and safety. After the cabin is removed, there would be a minor, long- term, site- specific, beneficial impact on human health and safety.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Methodology

The effects of each alternative are assessed for direct, indirect, and cumulative effects on selected impact topics. Actions are first analyzed for their *direct* and *indirect* effects. Direct effects are impacts that are caused by the alternatives at the same time and in the same place as the action. Indirect effects are impacts caused by the alternatives that occur later in time or are

farther in distance than the action. For example, construction grading may result in the *direct* removal of vegetation and soil from a site and result *indirectly* in increased erosion at the site later when it rains, and to water quality off- site. Effects to historic properties listed in or eligible for listing in the National Register of Historic Places also have been described in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800.

Potential impacts are described in terms of type, spatial context, duration, and intensity.

- **Type:** impacts are either *beneficial* or *adverse*. A resource may be affected both beneficially and adversely (e.g., one wildlife species may benefit while another is harmed), however an overall impact for the resource as a whole is determined.
- **Spatial Context:** impacts are 1) *site- specific* at the location of the action, 2) *local* on a drainage- or district- wide level, 3) *widespread* throughout the park, or 4) *regional* outside of the park.
- **Duration:** impacts are short- term or long- term. The definitions for these periods depend upon the impact topic and are described in Table 4.
- **Intensity:** the impacts are *negligible*, *minor*, *moderate*, or *major*. Definitions of intensity vary by impact topic and are provided in Table 4.

Impairment of Park Resources or Values

NPS Management Policies (NPS 2006) require analysis of potential effects to determine whether actions would impair park resources or values. The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, actions that would adversely affect park resources and values.

These laws give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may constitute impairment. Impairment may result from NPS activities in managing the park, from visitor activities, or from activities undertaken by concessionaires, contractors, and others operating in the park. An impact would be more likely to constitute impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

Each alternative was analyzed to determine if impacts constituted impairment to park resources and values.

Cumulative Impacts

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for both the no-action and preferred alternatives.

Cumulative impacts were determined by combining the impacts of the alternative with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects in Glacier National Park and, if applicable, the surrounding region. The following are past, present and reasonably foreseeable future actions that have and could occur in the vicinity of the project area:

Past Actions

- Construction of an accessible trail from Lake McDonald Lodge to Lake McDonald
- Replacement of the boat ticket office and removal of a garage
- Paving of walkways to Lake McDonald cabins
- Snyder Creek stabilization
- Hazard tree removal in the Lake McDonald Lodge area
- Replacement/repair of utility lines in the Lake McDonald developed area
- Construction by private landowner of a nonresidential structure on Lot 2, Block 24 of the Glacier Park Villa Sites (outside the historic district), and provision of a temporary ATV-accessible trail to lot for hauling construction material (2006)

Present Actions

- Normal operation of the Lake McDonald Lodge and campground (on-going)
- Improvements in the Lake McDonald developed area as described in the *Commercial Services Plan* (NPS 2004)
- Normal operation of Sprague Creek Campground (on-going)
- Horse-ride concession operations (on-going)
- Going to the Sun Road rehabilitation (on-going)

Future Actions

- Painting and exterior maintenance of adjacent Ewing [Artist-in-Residence] Cabin (2007)
- Construction of concession employee housing and addition to the coffee shop at Lake McDonald Lodge area.
- Removal of up to 6 seasonal housing units to be converted into parking areas in the Lake McDonald Lodge area.

Impacts to Cultural Resources and Section 106 of the National Historic Preservation Act

In this EA/AEF, impacts to cultural resources are described in terms of type, context, duration, and intensity, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). These impact analyses are intended, however, to comply with the requirements of both NEPA and Section 106 of the National Historic Preservation Act (NHPA). In accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106 of the NHPA (36 CFR Part 800, Protection of Historic Properties), impacts to historic properties were identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that were either listed in or eligible to be listed in the National Register

of Historic Places; (3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the National Register; and (4) considering ways to avoid, minimize or mitigate adverse effects.

Under the Advisory Council's regulations, a determination of either adverse effect or no adverse effect must also be made for affected National Register eligible cultural resources. An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualify it for inclusion in the National Register (e.g. diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance or be cumulative (36 CFR Part 800.5, Assessment of Adverse Effects). A determination of no adverse effect means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register.

CEQ regulations and the National Park Service's Conservation Planning, Environmental Impact Analysis and Decision- making (Director's Order #12) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g. reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Although adverse effects under Section 106 may be mitigated, the effect remains adverse.

A Section 106 summary is included in the impact analysis sections under the preferred alternative. The Section 106 Summary is intended to meet the requirements of Section 106 and is an assessment of the effect of the undertaking (implementation of the alternative) on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations.

Table 4. Impact thresholds for intensity and duration

Impact Topic	Negligible	Minor	Moderate	Major	Duration
Historic Structures and Cultural Landscapes	Impact(s) is at the lowest levels of detection - barely perceptible and not measurable. For purposes of Section 106, the finding of effect would be no adverse effect.	Action would affect the character defining features of a National Register of Historic Places eligible or listed property, but is in accordance with the Secretary of the Interior's Standards. For purposes of Section 106, the finding of effect would be no adverse effect.	Action would alter a character defining feature(s), diminishing the integrity of the resource to the extent that it is no longer eligible for listing in the National Register. For purposes of Section 106, the finding of effect would be adverse effect.	Adverse: Action would alter a character defining feature(s) of a National Historic Landmark, diminishing the integrity of the resource to the extent that its designation is threatened. For purposes of Section 106, the finding of effect would be adverse effect.	Short term—Effects extend only through the period of the project. Long term—Effects extend beyond the project period.
Soils	Soil productivity or soil fertility would not be affected or the effect would be below or at the lower end of detection. Any effects to soil productivity or soil fertility would be slight and not measurable.	The effects to soil productivity or soil fertility would be detectable, but small. The area affected would be local.	The effect to soil productivity or soil fertility would be readily apparent. Effects would result in a change in soils over a relatively wide area or multiple locations.	The effect on soil productivity or soil fertility would be readily apparent and would substantially change the character of soils over a large area.	Short- term: After implementation, would recover in less than 3 years. Long- term: After implementation, would take more than 3 years to recover or effects would be permanent.

Impact Topic	Negligible	Minor	Moderate	Major	Duration
Vegetation	Vegetation would not be affected or the changes would be so slight that they would not be of any measurable or perceptible consequence to the species' population.	Some individual native plants would be affected over a relatively small area, but the effects would be localized, and would be of little consequence to the species' population.	Some individual native plants would be affected over a relatively wide area or multiple sites and would be readily noticeable. A sizeable segment of a species' population could be affected.	A considerable effect on native plant populations would occur over a relatively large area.	<p>Short- term- After implementation, would recover in less than 3 years.</p> <p>Long- term- After implementation, would take more than 3 years to recover or effects would be permanent.</p>
Wildlife	Effects would be at or below the level of detection and the changes would be so slight that they would not be of any measurable or perceptible consequence to the wildlife species' population.	Effects on wildlife would be detectable, although the effects would be local and would be small and of little consequence to the species' population.	Effects on wildlife would be readily detectable and widespread, with consequences at the population level.	Effects on wildlife would be obvious and would have substantial consequences to wildlife populations in the region.	<p>Short- term: After implementation, would recover in less than 1 year.</p> <p>Long- term: After implementation, would take more than 1 year to recover or effects would be permanent.</p>

Impact Topic	Negligible	Minor	Moderate	Major	Duration
Threatened, Endangered, and Special Status Species	The alternative would affect an individual of a listed species or its critical habitat, but the change would be so small that it would not be of any measurable or perceptible consequence to the protected individual or its population. Negligible effect would equate with a “no effect” determination in U.S. Fish and Wildlife Service terms.	An individual(s) of a listed species or its critical habitat would be affected, but the change would be small. Minor effect would equate with a “may affect, not likely to adversely affect” determination for the species in U.S. Fish and Wildlife Service terms and would require informal consultation.	An individual or population of a listed species, or its critical habitat would be noticeably affected. The effect could have some long- term consequence to individuals, populations, or habitat. Moderate effect would equate with a “may affect” determination in U.S. Fish and Wildlife Service terms and would be accompanied by a statement of “likely...” or “not likely to adversely affect” the species and would require either informal or formal consultation.	An individual or population of a listed species, or its critical habitat, would be noticeably affected with a vital consequence to the individual, population, or habitat. Major effect would equate with a “may affect, likely to adversely affect” or “not likely to adversely affect” determination in U.S. Fish and Wildlife Service terms and would require formal consultation.	Short- term—After implementation, would recover in less than 1 year. Long- term—After implementation, would take more than 1 year to recover or effects would be permanent.
Visitor Use and Experience	Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. The visitor would not likely be aware of the effects associated with the alternative.	Changes in visitor use and/or experience would be detectable, although the changes would be slight. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.	Changes in visitor use and/or experience would be readily apparent. The visitor would be aware of the effects associated with the alternative.	Changes in visitor use and/or experience would be readily apparent and have important consequences. The visitor would be aware of the effects associated with the alternative.	Short- term - Occurs only during project implementation or one month. Long- term – Occurs for more than one month or is permanent.

Impact Topic	Negligible	Minor	Moderate	Major	Duration
Human Health and Safety	Health and safety would not be affected, or the effects would not be noticeable.	The effect would be detectable, but would not have an appreciable effect on health and safety.	The effects would be readily apparent, and would result in a substantial change in health and safety in a manner noticeable to staff and the public.	The effects would be readily apparent, would result in a substantial change in health and safety in a manner noticeable to staff and the public, and be markedly different from existing operations.	Short- term - Effects last for the duration of the project Long- term - Effects last longer than the duration of the project.

Historic Structures and Cultural Landscapes

AFFECTED ENVIRONMENT

Historic Structures and Districts

The Roberts Cabin is a building contributing to the significance of the Glacier Park Villa Sites Historic District. The Historic District is eligible for listing in the National Register of Historic Places under Criteria A and C as a representative example of recreational camp development on Lake McDonald in Glacier National Park, Flathead County, Montana. The Montana State Historic Preservation Review Board concurred in the eligibility of the Glacier Park Villa Sites Historic District at its meeting on June 3, 2006. The significance of the cabin lies in its L- plan, camp style design. Notable features are a small central stone fireplace, pine paneling, wood floors, a screened in porch, and large windows overlooking the lake. A large deck and bedroom addition were constructed prior to NPS acquisition in 1975.

The Glacier National Park Multiple Property Document (MPD) for “Recreational Camps on Lake McDonald, 1892- 1970” provides the historic context for the development of such wilderness recreational properties. The four cabins in this district exemplify one type of property division- - - the formally platted subdivision- - - and camp development that occurred around Lake McDonald in the first half of the twentieth century, from before the formation of the park in 1910 until just after World War II. Like all of the recreational properties around the lake, the four properties originated with a homestead claim made in the 1890s and patented before the park was set aside. George Snyder established a hotel on the point in 1895 and acquired a patent in 1907. When he sold the 168.65- acre homestead property to John and Olive Lewis in 1906, they devised several schemes to develop the property, including construction of a new hotel and selling small cabin lots. In 1916, the Lewises formed the Glacier Park Land Company with H.D. Apgar and E.E. Day as an intermediate company for selling land in the Glacier Park Villa Sites subdivision platted and filed in Flathead County in 1916. The Roberts Cabin was one of four cabins built on lakeshore lots in that subdivision.

The Glacier Park Villa Sites subdivision was platted and dedicated in Flathead County on September 7, 1916. The subdivision included 36 blocks of 744 lots in four rows, which abutted the Lake McDonald shoreline at the west end. Thirty- one of the blocks were divided into 24 lots measuring 25- feet by 70- feet and platted in two ranges of twelve each. At the west end, three irregular blocks (17, 18, and 19) with 36 lots followed the shoreline. A street measuring 40 feet wide ran east west between the 2nd and 3rd ranges, and four additional streets of the same width ran north south between every other block. Remaining streets were 25 feet wide. The streets were given Blackfoot Indian names, including Nitosi (sun), Kokomokison (moon), Omo kottiyo (mountain lion), and Omkokiyo (grizzly bear). The shoreline was designated Geseckse matsum (Glad- to- see- you Park). According to a contract, the “lands [were] to be used for summer homes and enjoyment of the lake and surrounding attractions.” Each deed also contained a grant of the right and easement to use the hotel docks.

The Glacier Park Villa Sites did not prove to be a particularly successful venture. By c.1930, 44 owners had purchased 48 lots. While lakefront lots had sold best, no detectable pattern suggests why some interior lots and not others had sold. Most owners held a single lot. Access was rough as the streets were never laid out. Most owners used their lots for tenting. Near the lake, however, four owners built cabins typical of Lake McDonald recreational camp buildings. Two of these are L- plan log cabins and two are frontal gable frame building. All are modest buildings partially hidden within the surrounding forest. They stand on Lots 1 and 4 in Block 17 and Lot 23 in Block 16 at the western end of the subdivision’s main grid. The Roberts Cabin, the fourth cabin built in the Historic District, was constructed on Lot 3 of Block 17 soon after the war and used characteristic post- war cabin construction materials. These four cabins are the only known buildings ever constructed within the subdivision.

Florence Randolph and Mabel C. Miller purchased Lot 3 of Block 17 from the Glacier Park Land Company in 1917, and relinquished it for back taxes to Flathead County in 1941. Edward Neitzling and James Lee owned the lot jointly, and then Lee independently, until it was sold to Edna S. Graham in 1949. Mary Agnes Roberts, Graham's daughter, sold the lot to the United States in 1975, subject to a life lease. The adjacent cabin, on Lot 1, was last owned by Cornelia Clack Graham, daughter-in-law of Edna Graham.

The MPD also describes the architecture associated with recreational cabins on Lake McDonald. The Glacier Park Villa Sites Historic District retains two log cabins built using local timber and stone and augmented with stock mill work and two frame cabins, one of them being the Roberts cabin, representative of pre- and post- World War II recreational buildings around Lake McDonald. It is believed Edna S. Graham constructed the Graham- Roberts cabin shortly after she purchased the lot in 1949. The cabin retains the spare, low- slung lines of the taste emerging in domestic architecture during the late 1940s and early 1950s. While sited in the traditional manner of earlier cabins, it uses building materials more popular around Lake McDonald in the later period, including milled siding shaped to imitate logs and dimensional lumber. Like most family cabins, this one has a cobblestone fireplace.

The Glacier Park Villa Sites Historic District partially overlaps the Lake McDonald Historic District. Two of the four buildings in the Glacier Villa Sites Historic District (The Roberts Cabin and the Johnson Cabin were excluded at the time of the listing since they were not yet believed to be 50- years- old.) also contribute to the significance of the Lake McDonald Historic District. (See Map 1). The Lake McDonald Historic District was listed in the National Register of Historic Places in 1978. The Secretary of the Interior designated Lake McDonald Lodge (independent of the remainder of the district) as a National Historic Landmark in 1987. In 1996, the Lake McDonald Lodge Historic District National Register Nomination Form was amended, to among other things, expand the boundary to include the Ewing [Artists- in- Residence] Cabin (1105) and the Hunter [Boatman's] Cabin (1106). The nomination states that "They contribute to our understanding of private recreational development along Lake McDonald - - a pattern of development critical to the growth of the Lake McDonald Lodge district. They are also excellent examples of Glacier rustic architecture as developed outside the purview of the NPS Landscape Division."

Cultural Landscapes

The Glacier Park Villa Sites Historic District is located south of the point projecting from the east shore of Lake McDonald occupied by the Lake McDonald Lodge. The district embraces a cluster of four recreational camp properties, each with a cabin. Three of the cabins occupy lots with lake frontage, while the fourth cabin's lot is immediately across the south access road to the Lodge from the first three cabins. The road is an original portion of the Going- to- the- Sun Road and became a secondary entrance after the main road was re- routed to the south in the 1930s. The area is lightly wooded, mainly with conifers framing the cabins and coming right down to edges of the road and to the edge of the pebble beach, where the trees give way to deciduous shrubs. The Roberts and Johnson cabins on the lake side of the road are linked by small footpaths lined with cobblestones. Both of these cabins have small parking areas at road grade set off by retaining walls behind them. The northernmost shore cabin has a parking platform set below grade and north of the cabin. The cabin across the road stands on a slight rise and a short driveway angles away from the road to reach it. None of the cabins has outbuildings dating to the period of significance.

The cultural landscape characteristics of the Glacier Park Villa Sites Historic District are representative of most cabins on Lake McDonald. The shore's entire length is fringed by mixed coniferous forest, and because of development patterns, (lots or subdivisions or homesteads) groups of cabins are found at various intervals partially hidden from view. The cabins generally stand in regularly spaced rows on level ground. For cabins set on sloping ground, builders

constructed banked foundations or piers of graduating height, with the back sill at grade and the front wall and porch raised and reached by a flight of steps.

Recreational cabins on Lake McDonald, like those on other lakes, put their handsomest face, or front, to the water, as the lake was their reason for existence. All recreational cabins had front porches or decks spanning part, or all, of the main block. The front porch provided a sheltered intermediate living space set between the dark cabin interior and the outdoors with filtered views of the lake. The cabins are surrounded by open lawns, or ground cleared of all underbrush, shaded by mature trees, a landscape tendency still popular in the first half of the twentieth century. Practically, the open area allowed light into the cabins in a time before electric lights were used in many of these buildings. More important, however, it was an aesthetic rooted in the naturalistic park designs of the romantic period of the nineteenth century. The lawn was a small buffer, a middle landscape between the domesticity of the cabin, however rustic, and wilderness of the surrounding forest.

IMPACT ANALYSIS

IMPACTS OF THE NO ACTION ALTERNATIVE

Historic Structures and Districts

This alternative would permit the natural deterioration of the Roberts Cabin and its eventual loss. Neglect of a property, which causes its deterioration, is one example of an adverse effect defined in 36 CFR 800.5. Loss of the cabin also would impact the National Register characteristics of the Glacier Park Villa Sites Historic District. The district's three lakeside cabins, placed in a row, are representative of the design, setting, and feeling of other cabins on the Lake. The result of the alternative would be a **moderate, long- term, site- specific, adverse** impact to the Glacier Park Villa Sites Historic District.

Section 106: In accordance with 36 CFR 800.5, Glacier National Park has reached a finding of **adverse effect** for the no action alternative.

Cultural Landscapes

This alternative would permit the natural deterioration of the Roberts Cabin and its eventual loss. The eventual loss of the building would impact the cultural landscape characteristics of the Glacier Park Villa Sites Historic District, the Lake McDonald Historic District, and the other recreational camps on Lake McDonald. Most specifically, the loss of the cabin, which sets between two other cabins, would reduce the characteristic of cabin groupings. The result of the alternative would be a **minor, long- term, site- specific, and adverse** impact.

Section 106: Section 106 is applicable to properties listed in, or eligible for listing in, the National Register of Historic Places. Since the National Register Nomination for the Glacier Park Villa Sites Historic District did not identify individual landscape features contributing to the significance of the district, project impacts on the cultural landscape characteristics, such as the district's overall design, setting, and feeling are evaluated under historic buildings and structures.

Cumulative Effects of the No Action Alternative

The No Action Alternative would not create, remove, or alter any historic buildings within the Glacier Park Villa Historic Sites Historic District and would not contribute cumulatively to any other projects occurring in the Lake McDonald Historic area. Continued maintenance and upkeep of historic buildings in both districts would have a cumulative minor, long- term, localized, beneficial impact on the historic structures and the districts. The deterioration of the Roberts Cabin would add a moderate, long- term, site- specific adverse impact to the historic building and the districts. The cumulative impacts of this project combined with other past, present, or reasonably foreseeable future projects will continue to have **moderate, long- term, localized, adverse** impacts to the Glacier Park Villa Sites and Lake McDonald Historic

Districts.

PREFERRED ALTERNATIVE AND FINDING OF EFFECT

Historic Structures

This alternative calls for the demolition of the Roberts Cabin. Physical destruction of a property is one example of an adverse effect defined in 36 CFR 800.5. The result of the alternative would be a **moderate, long- term, site- specific, adverse** impact to the Glacier Park Villa Sites Historic District.

Section 106: In accordance with 36 CFR 800.5, Glacier National Park has reached a finding of **adverse effect** for the preferred alternative.

Cultural Landscapes

This alternative calls for the demolition of the Roberts Cabin. The loss of the building would impact the cultural landscape characteristics of the Glacier Park Villa Sites Historic District, the Lake McDonald Historic District, and the other recreational camps on Lake McDonald. Most specifically, the loss of the cabin, which sets between two other cabins, would reduce the characteristic of cabin groupings. The result of the alternative would be **minor, long- term, site- specific, and adverse**.

Section 106: Section 106 is applicable to properties listed in, or eligible for listing in, the National Register of Historic Places. Since the National Register Nomination for the Glacier Park Villa Sites Historic District did not identify individual landscape features contributing to the significance of the district, project impacts on the cultural landscape characteristics, such as the district's overall design, setting, and feeling are evaluated under historic structures.

Cumulative Effects of the Preferred Alternative

The Preferred Alternative would remove a building contributing to the significance of the Glacier Park Villa Sites Historic District and this action would contribute cumulatively to other projects occurring in the Glacier Park Villa Sites and Lake McDonald Historic Districts. Continued maintenance and upkeep of historic buildings in both districts would have a cumulative minor, long- term, localized beneficial impact on the historic structures and the districts. It has been proposed that the adjacent Artist- In- Residence cabin be painted and the exterior be preserved to mitigate the adverse impact of the Roberts Cabin removal. Cumulatively, the adverse impact on historic resources would be lessened by this mitigation. The removal of the Roberts Cabin would add a moderate, long- term, site- specific adverse impact to the historic building and the Glacier Park Villa Sites Historic District. The cumulative impacts of this project combined with other past, present, or reasonably foreseeable future projects will have minor, long- term, adverse impacts to the district.

Conclusion

The No Action Alternative would have a **moderate, long- term, site- specific, adverse** impact on the Glacier Park Villa Sites Historic District. The No Action Alternative would have a **minor, long- term, site- specific, adverse** impact on cultural landscapes. The No Action Alternative would cumulatively add a **minor, long- term, site- specific, adverse** impact to the overall **moderate, long- term, localized, beneficial** impacts of historic district preservation.

The Preferred Alternative would have a **moderate, long- term, site- specific, adverse** impact on the Glacier Park Villa Sites Historic District. The cabin removal would have a **minor, long- term, site- specific, adverse** impact on cultural landscapes in the Lake McDonald Lodge Historic District and the Glacier Park Villa Sites Historic District. The Preferred Alternative would cumulatively add a minor, long- term, site- specific, adverse impact to the overall **moderate, long- term, localized, beneficial** impacts of historic district preservation.

Under both alternatives, there would be no major, adverse impacts to a resource or value whose

conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation and proclamation of Glacier National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the park's resources or values.

Soils

AFFECTED ENVIRONMENT

The Lake McDonald Lodge developed area is dominated by Rocky and Sandy Alluvial Forest Soils (A3). The entire site occupies an alluvial fan of Snyder Creek. These Alluvial Forest Soils have a surface layer of loam or sandy loam with sandy textures below. The soil is rocky throughout and rock content increases with depth. The soils are well suited for many development activities, such as foundations, roads, and trails because of their sandy texture and high rock content. Soil productivity is moderate to high, and erosion potential is moderate. Weed invasion potential is high because of the sandy soil texture (Dutton et al. 2001).

METHODOLOGY

The affected environment for soils and geology is limited to the property parcel where the Roberts cabin is located. The parameters used for intensity analysis are soil productivity and total area of disturbance or restoration.

- Negligible:* Soil productivity or soil fertility would not be affected or the effect would be below or at the lower end of detection. Any effects to soil productivity or soil fertility would be slight and not measurable.
- Minor:* The effects to soil productivity or soil fertility would be detectable, but small. The area affected would be local.
- Moderate:* The effect to soil productivity or soil fertility would be readily apparent. Effects would result in a change in soils over a relatively wide area or multiple locations.
- Major:* The effect on soil productivity or soil fertility would be readily apparent and would substantially change the character of soils over a large area.
- Short-term:* After implementation, would recover in less than 3 years.
- Long-term:* After implementation, would take more than 3 years to recover or effects would be permanent.

IMPACT ANALYSIS

IMPACT ANALYSIS OF THE NO ACTION ALTERNATIVE

There would be no impact on soils around the Roberts cabin, since no actions that would affect soil resources are proposed under this alternative.

Cumulative Impacts of the No Action Alternative

Because there would be no new ground disturbance under the No Action Alternative, and therefore no new impacts added to impacts from past, present and foreseeable projects, there would be no cumulative effects resulting from the No Action Alternative.

IMPACT ANALYSIS OF THE PREFERRED ALTERNATIVE

The action alternative proposes complete removal of the existing structure, including the removal of both the concrete retaining walls. The area from the road to the cabin would be recontoured and sloped to avoid future erosion. The soil/rock material behind the retaining walls was taken from the cabin site when the site was leveled. While there would be a temporary disturbance of soil in this area, the area would more closely resemble the pre-development topography after the work is finished. Peripheral soil disturbance during cabin removal would

be minor, as large equipment use would occur only in the previously disturbed soil of the cabin footprint. Removal activities would be unlikely to leave soil pollutants that could be incorporated into the soil. Best management processes (Appendix A) would be used to prevent soil erosion, compaction, and sedimentation in the lake.

Once the cabin material, cement pilings, and utility lines are removed from the site, there should be very little additional soil disturbance. Excavated areas would be filled in and returned to a natural slope. Hand tools would be used to scarify compacted soil. Topsoil would be removed before resloping the retaining wall area. Topsoil would then be placed on top of the regraded site for revegetation. The soil nutrients would be assessed and organic material would be used to augment the soil as needed. Native vegetation would be planted to help reduce soil erosion and begin the process of restoring natural soil conditions to the site. The immediate impact to soils from the Preferred Alternative would be minor, short- term, site- specific, and adverse. The result of resloping and revegetation would result in a **minor** (due to the small area involved), **site- specific, long- term** and **beneficial** impact to soil resources.

Cumulative Impacts of the Preferred Alternative

The overall cumulative impact of past, present, and future activities (listed above) in combination with the impacts from the Preferred Alternative would be minor, localized, long-term and adverse. Construction activities degrade productivity and alter the natural state of the soil resource within the immediate footprint of new structures, pavement, or formalized parking areas. Soils surrounding construction sites may be compacted and top soil may be degraded or disturbed. Excavation of utility lines disturbs the soil profile, but top soil is salvaged and replaced following the disturbance. Campground operations and horse concession use cause trampling or soil compaction and some erosion within defined trails and campground use areas. Soil traversed by an all- terrain vehicle and trailer in small building construction on private property would be compacted, but impacts would be minimized because the activity will not occur while soils are moist. Conversion of existing structures to parking areas would contribute little change to existing quality or health of soils. The cumulative impact of these activities would be **minor adverse** impacts, which would be generally **localized and long- term**.

CONCLUSION

There would be **no effect** to soils around the Roberts cabin from the No Action Alternative, since no new actions are proposed. Because the No Action Alternative would not be contributing to impacts of past, present, and future actions, there would be no cumulative impacts from the No Action Alternative. The Preferred Alternative would have **minor, site- specific, long- term beneficial** impacts to soil resources resulting from soil scarification, nutrient augmentation, and revegetation. The Preferred Alternative would have slightly less adverse impacts to soil resources than the No Action Alternative due to the beneficial impacts of rehabilitating a developed site back to natural conditions. Past, present, and future actions, in combination with the impacts of the Preferred Alternative, would result in **minor, long- term, localized, adverse** cumulative impacts to soil resources.

Under the alternatives there would not be major adverse impacts to soil resources, whose conservation is 1) necessary to fulfill specific purposes identified in the park's enabling legislation, 2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or 3) identified as a goal in the park's General Management Plan or other relevant NPS planning documents, there would be no impairment of park soil resource values related to the alternatives.

Vegetation

AFFECTED ENVIRONMENT

The southeast shore of Lake McDonald lies within a western red cedar/queencup beadleily habitat type. The native vegetation surrounding the Lake McDonald Lodge complex is a mature, 230- year old forest (Barrett 1997) dominated by very large western red cedar (16 to 22+ inches diameter at breast height) intermixed with large western larch, western white pine, and Douglas fir. The midstory is dominated by pole- and sapling- sized western hemlocks. Twinflower, sidebells wintergreen, queencup beadleily, round- leaved violet, foamflower, snowberry, prince's- pine, northwest sedge, roughleaf ricegrass, and beargrass comprise the low- growing open understory. There are numerous old- growth black cottonwood trees (20 to 30 inches diameter at breast height) on the edge of this forest near the southern access road adjacent to the Roberts Cabin property.

Trees on or adjacent to the Roberts cabin property include western hemlock, paper birch, western red cedar, western white pine, black cottonwood, and western larch. Understory vegetation is relatively sparse on the site, but includes Rocky Mountain maple, common snowberry, Oregon grape, mountain lover, twinflower, beargrass, dwarf- rattlesnake plantain, round- leaved violet, woods strawberry, and mosses such as *Polystichum spp.* and *Rhytidiadelphus spp.* Weedy species are also present including Paul's betony, common plantain, and the noxious species, Canada thistle. Additional non- native species in this area which could have potential to invade at this site are Kentucky bluegrass, orchardgrass, quackgrass, clovers, and the state- listed noxious species, spotted knapweed, oxeye daisy and St. Johnswort. There are no records of rare or sensitive plant species on the Roberts Cabin property, nor were any found during a site survey in 2006.

METHODOLOGY

The methodology used to analyze the potential impacts on vegetation is an analysis of expected changes to the vegetation under the different alternatives that is or would be present on the Roberts Cabin parcel. Changes in surface disturbance and vegetation productivity are assessed.

- Negligible:* Vegetation would not be affected or the changes would be so slight that they would not be of any measurable or perceptible consequence to the species' population.
- Minor:* Some individual native plants would be affected over a relatively small area, but the effects would be localized, and would be of little consequence to the species' population.
- Moderate:* Some individual native plants would be affected over a relatively wide area or multiple sites and would be readily noticeable. A sizeable segment of a species' population could be affected.
- Major:* A considerable effect on native plant populations would occur over a relatively large area.
- Short- term:* After implementation, would recover in less than 3 years.
- Long- term:* After implementation, would take more than 3 years to recover or effects would be permanent.

IMPACT ANALYSIS

IMPACT ANALYSIS OF THE NO ACTION ALTERNATIVE

Under the No Action Alternative, no new surface disturbances would be proposed beyond those currently affecting the project area. The project area is known to contain exotic plant species among the native vegetation on the site. Exotic weed species including noxious species would

likely continue to persist and/or spread and establish in areas within the Roberts Cabin property, but there would be no additional impacts to vegetation resources resulting from surface disturbances that would encourage increased spread of weedy species or displacement of native species under the No Action Alternative. Consequently, there would be no change from current conditions (no effect) on vegetation from the No Action Alternative.

Cumulative Impacts of the No Action Alternative

There would be no cumulative effects from the No Action Alternative because no new ground disturbance would occur and no vegetation would be impacted by a federal action.

IMPACT ANALYSIS OF THE PREFERRED ALTERNATIVE

Approximately a quarter acre of land would be impacted by this project. After the cabin removal, the park's revegetation staff would rehabilitate the site, aiming to return the disturbed site to a natural state similar to native vegetation found in undisturbed sites along the lakeshore within the western red cedar/queencup beadrill habitat type (as described in the vegetation affected environment). The area would be surveyed for non- native plant species, which would be hand pulled or sprayed before the cabin is removed. Weed treatment would follow guidelines in the park's current Exotic Plant Management Plan (GNP 1991) or an updated plan if available, taking proximity of the lakeshore into account. Seed and native plant cuttings would be collected from the site or nearby. Following building demolition and site preparation through soil scarification and nutrient augmentation if needed, the seed and cuttings would be planted. Larger shrubs and trees would be planted to naturally screen the site and make it visually blend into the rest of the lakeshore. The two live maple clumps that would be removed between the retaining walls would be replanted in the same location after the regrading of the hillside. The site would be signed to reduce disturbance of the site while native plants become established. The vegetation management staff would continue to monitor the site for non- native plant encroachment and native plant success. Because previously disturbed ground is highly susceptible to infestation by weed populations, the site would continue to be treated for noxious weeds if warranted. Due to restoration of native vegetation to the site, impacts of this alternative on vegetation resources and productivity would be **minor, site- specific, long- term and beneficial**.

Cumulative Impacts of the Preferred Alternative

Construction activities in the Lake McDonald Area and nearby developed areas eliminate vegetation and result in a loss of productivity within the immediate footprint of new structures, pavement, or formalized parking areas for the long- term. Vegetation surrounding construction sites may be trampled or temporarily removed in the short- term, but revegetation and natural succession would mitigate these impacts and return normal productivity within a few years. Excavation of utility lines disturbs the vegetated soil surface, but top soil is salvaged and replaced following the disturbance, often with many plants and plant propagules intact. Campground operations and horse concession use cause trampling of vegetation and its supporting soil resource within defined use areas. These activities can also contribute to the spread of non- native species. Conversion of existing structures to parking areas would result in minimal vegetation change, but it could open additional ground surface to weed infestations. While the Preferred Alternative would contribute a minor, beneficial impact from revegetation of a quarter acre, the overall cumulative impact of these activities in combination with the impacts from the Preferred Alternative would be **minor, site- specific, long- term and adverse**.

CONCLUSION

Under the No Action Alternative, existing conditions and trends would continue, including current threats to native vegetation communities from the spread of noxious and exotic plant species in the surrounding area, but **no new effects or cumulative effects** are anticipated from this alternative. The Preferred Alternative would have **minor, site- specific, long- term beneficial** impacts to vegetation resources and productivity resulting from soil improvements,

native plant installation, and weed treatment. The Preferred Alternative would have slightly less adverse impacts to soil resources than the No Action Alternative due to the beneficial impacts of rehabilitating a developed site back to natural conditions. Past, present, and future actions, in combination with the impacts of the Preferred Alternative, would result in **minor, long-term, site-specific, adverse** cumulative impacts to vegetation resources.

The alternatives would not result in major adverse impacts to vegetation resources, whose conservation is 1) necessary to fulfill specific purposes identified in the park's enabling legislation, 2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or 3) identified as a goal in the park's General Management Plan or other relevant NPS planning documents; there would be no impairment of park vegetation resource values related to these alternatives.

Wildlife

AFFECTED ENVIRONMENT

Over 300 species of terrestrial wildlife occupy Glacier National Park, either seasonally or year-round. The vegetation descriptions above also describe wildlife habitat in the park. The McDonald Valley is unique because it is the widest and deepest valley of any tributary on the west side of the park, and Lake McDonald is the largest lake in the park. Although the climate of this area is a modified north Pacific coast type, topographical influences, including valley-ridge configurations, elevation, lake effect, aspect and exposure, combine to create extreme variations in weather over short distances and consequently, a variety of wildlife habitats (Kuchel 1977).

There is year-round habitat for many species of wildlife in the valley, including moose, elk, mule and white-tailed deer, black and grizzly bear, cougar, lynx, fisher, wolverine, and marten. There is ungulate winter range in the McDonald Valley. The stream inlets of Lake McDonald and adjacent areas provide important breeding, foraging, roosting, and wintering habitat for resident and migrant bald eagles. The McDonald Valley also contains nesting habitat for golden eagles, osprey, pileated woodpeckers, and barred owls. Upper McDonald Creek, above the inlet of Lake McDonald, has been identified as the single most important harlequin duck-breeding stream in Montana (Ashley 1998); and Lake McDonald is an important area for common loons and numerous other waterfowl, especially during migration.

Many areas in and around the Lake McDonald developed area are used by wildlife; however, the amount of development and human presence probably discourages use of the area by some species. There is a grizzly bear travel corridor immediately east of the developed area across Going-to-the-Sun Road, and the alpine and subalpine habitats traversed by Going-to-the-Sun Road are important for grizzly bears, lynx, golden eagles, bighorn sheep, mountain goats and wolverines. Snags along the lakeshore, including one in front of the Roberts Cabin, are used frequently as perch sites by foraging bald eagles, especially during the winter (December-January).

METHODOLOGY

The methodology used to analyze the potential impacts on wildlife is an analysis of expected changes to wildlife under the different alternatives that is or would be present on the Roberts Cabin parcel. Glacier National Park wildlife databases and current research were used to determine wildlife habitat and use in the project area. Changes in behavior, movement patterns, and disturbance are assessed. The following levels of impacts were defined.

Negligible: Effects would be at or below the level of detection and the changes would be so slight that they would not be of any measurable or perceptible consequence to the wildlife species' population.

Minor: Effects on wildlife would be detectable, although the effects would be local and

would be small and of little consequence to the species' population.

Moderate: Effects on wildlife would be readily detectable and widespread, with consequences at the population level.

Major: Effects on wildlife would be obvious and would have substantial consequences to wildlife populations in the region.

Short-term: After implementation, would recover in less than 1 year.

Long-term: After implementation, would take more than 1 year to recover or effects would be permanent.

IMPACT ANALYSIS

IMPACT ANALYSIS OF THE NO ACTION ALTERNATIVE

The removal of the deck surrounding the cabin would cause a temporary noise disturbance to wildlife in the area. However, the process would not take more than a day or two and would occur during the visitor season when there is already considerable noise present in the area. No other actions are proposed under the alternative that would affect wildlife. Overall, the impact would be **negligible, short-term, site-specific, and adverse**.

Cumulative Impacts of the No Action Alternative

Most of the cumulative impact projects have the potential to impact wildlife. However, they are mostly conducted in the Lake McDonald Lodge and campground developed areas during the summer visitor season when human presence discourages wildlife use of the area. These activities include walking, biking, fishing, and auto and boat traffic in the immediate area of the cabin. The overall impact on wildlife from other activities in the analysis area would be **minor, short-term, local, and adverse**. The No Action Alternative would be adding only negligibly to the cumulative level of impact for a short period.

IMPACT ANALYSIS OF THE PREFERRED ALTERNATIVE

The removal of the Roberts Cabin would take approximately 2-3 weeks and likely cause the same amount of noise disturbance throughout the project. Wildlife would be discouraged from using the area during the day, though night movements should not be affected. Since the building has been unoccupied for several years, some species of wildlife, including bats, may inhabit the building during the summer. Female bats with young may use the cabin to raise their young. The cabin removal would occur in September when young bats are able to fly and all migratory bats are expected to leave the area and migrate to winter habitat. Some bats that had not left the area may be displaced, however during recent visits to the building, signs of regular habitation were not observed. There are several other old structures in the area that bats can inhabit including bat houses that were placed near an adjacent cabin. Once the site is restored, it would provide a small patch of native vegetation along the shoreline where there are currently several buildings. The trees that would be removed are not important perch or forage trees for eagles. The trees that would be removed are right next to the road and are relatively small diameter trees. Overall, most wildlife species that use the area are accustomed to some human disturbance during the summer season and the impacts would be **minor, short-term, site-specific, and adverse**.

Cumulative Impacts of the Preferred Alternative

Most of the cumulative impact projects have the potential to impact wildlife. Human activities within the developed areas, the lake, and discourages wildlife use of the area and have a minor, adverse, long-term, site-specific impact on wildlife. These activities include walking, biking, fishing, and auto and boat traffic in the immediate area of the cabin. Demolition of the cabin would add slightly more disturbance and be a short-term, adverse impact in conjunction with other projects, but this would be offset with the long-term benefit of additional native

vegetation in the area and reduction of human development along the lakeshore. The overall cumulative impact of the Preferred Alternative combined with other actions in the analysis area would remain **minor, short- term, local, and adverse**. The disturbance from the removal of the cabin would be adding only negligibly to the cumulative level of impact for a short period and would not change the overall cumulative impacts of the project.

CONCLUSION

The No Action Alternative would result in **negligible, short- term, site- specific, and adverse** impacts due solely to the temporary noise disturbance of removing the cabin's deck. Cumulative impacts on wildlife from the No Action Alternative would be **minor, short- term, local, and adverse** although the alternative would be adding only negligibly to these impacts. The Preferred Alternative would cause **minor, short- term, site- specific, adverse** impacts due to noise disturbance for the period of demolition, and would provide **negligible, long- term, site- specific benefits** from conversion of a building site to native vegetation. Benefits would be minimal because of the proximity of other cabins and continued human activity in the area. Cumulative effects would be **minor short- term, local, and adverse**. However, the long- term benefits of returning three cabin sites to their natural state would have a minor reduction on the amount of impact that other activities have on wildlife.

Because there would be no major, adverse impacts to wildlife resources whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation and proclamation of Glacier National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents; there would be no impairment of the park's resources or values.

Threatened, Endangered, and Sensitive Species

AFFECTED ENVIRONMENT

There are five threatened or endangered wildlife species listed by the U.S. Fish and Wildlife Service (USFWS) in Glacier National Park. They are the threatened bald eagle (*Haliaeetus leucocephalus*), grizzly bear (*Ursus arctos*), Canada lynx (*Lynx canadensis*), and bull trout (*Salvelinus confluentus*), and the endangered gray wolf (*Canis lupus*). There would be no impact on Canada lynx, bull trout, grizzly bears, or grey wolves from this project.

Bald Eagle. Bald eagles use portions of Glacier National Park on a year- round basis as nesting and wintering residents (Yates 1989), and as seasonal migrants (McClelland et al. 1994, Yates et al. 2001). There are 11 known bald eagle breeding areas in the park, including one at Lake McDonald. The park is also within a major bald eagle migration corridor (McClelland et al. 1994, Yates et al. 2001). During winter, some eagles remain to forage on Lake McDonald and along the Middle and North Forks of the Flathead River. A primary bald eagle and golden eagle migration route crosses the upper end of Lake McDonald.

The Montana Bald Eagle Management Plan (Montana Bald Eagle Working Group 1994) provides guidance for conservation and management efforts for bald eagles in Montana. The Montana plan is an extension of the Pacific States Bald Eagle Recovery Plan (USFWS 1986) developed by the USFWS and identifies nest site management zones and general guidelines to be used in lieu of more site- specific data. The plan also provides guidance for management based on minimum human disturbance and provides for various levels of protection within nesting territories. The park's Bald Eagle Operational Plan and Habitat Management Guidelines (NPS 1999) provides site- specific information and outlines habitat management actions for the protection and perpetuation of bald eagle use areas in the park. Productivity of Glacier's nesting bald eagle population is lower than productivity documented for the rest of Montana (NPS files), and less than that recommended in the Pacific States Bald Eagle Recovery Plan for maintaining viable populations of nesting bald eagles. Reasons for lower productivity in the park

may include severe winter and spring weather, deterioration of native fisheries (prey species), and human disturbance near nest and forage sites.

In 2006, six of the twelve nest sites in the park were confirmed to be active and five were successful (i.e., fledged at least one young). The Lake McDonald nest, located approximately 350 meters from the northwestern shore on Howe Ridge, was confirmed to have fledged at least one young eagle. Eighteen eagles have been produced from this nest since its discovery in 1982 (NPS files). During the nesting season, the adult eagles use foraging perches along the upper half of the east shore of Lake McDonald, nearly the entire west shore of the lake, lower McDonald Creek, portions of the Middle Fork Flathead River, and lakes in the Camas Creek drainage (NPS 1999b). The head of Lake McDonald is also used frequently during the fall and winter, often by migrating birds.

Nesting habitat characteristics of bald eagles include old- growth forest types near water, where eagles are afforded some seclusion from human activity. Many nest- sites are located near lake inlets and larger rivers, where foraging for fish is productive. Vegetative screening provides much of the necessary seclusion for eagles near nest, roost, forage, and feeding areas (Caton et al. 1992). Restrictions on human activity are implemented during the nesting season at the head of Lake McDonald (NPS 1999b).

Bald eagles are especially sensitive to human disturbance during the breeding period (Hamann et al. 1999). The breeding period includes courtship (late February to mid- April), egg laying and incubation (late March to late May), nestling stage (mid- May to early August), and fledging (early August to late September). Effects of disturbance on breeding birds during incubation could include short- term nest abandonment or nest desertion resulting in exposure of the eggs to detrimental temperature extremes and predators (Hamann et al. 1999). Disturbance during rearing can result in trampling of young, young jumping or falling from nests before they can fly, and/or separation of young from parents. Chronic disturbance can cause nest abandonment. The potential for nest failure and nestling death due to human disturbance is reduced, but not eliminated, after nestlings reach an age of about 4 weeks (usually early to late June in GNP). Nestlings usually fledge at 10 to 12 weeks of age (by mid- August), but young eagles do not migrate from breeding areas until sometime between mid- September and early October (McClelland et al. 1996). Outside of the breeding season, disturbance by humans may cause birds to alter their feeding habits, thereby reducing normal food intake (Hamann et al. 1999). Bald eagles frequently use snags for perching sites.

Species of Concern. State listed species of concern to Glacier National Park are those species that are rare, endemic, disjunct, vulnerable to extirpation, in need of further research, or likely to become threatened or endangered if limiting factors are not reversed. Likewise, a species may be of concern because of characteristics that make them particularly sensitive to human activities or natural events. In addition, species of concern may also include big game, upland game birds, waterfowl, carnivores, predators, and furbearers whose populations are protected in the park but subject to hunting and trapping outside of the park.

Golden eagles (*Aquila chrysaetos*) forage in open habitats and probably only pass over the project area during migration; there is a major golden eagle migratory corridor directly over the project area. The northern goshawk (*Accipiter gentilis*) typically nests in mature conifer forest like that found in the project area; nesting and foraging, though undocumented, may occur. The pileated woodpecker (*Dryocopus pileatus*), three- toed woodpecker (*Picoides tridactylis*), and brown creeper (*Certhia americanus*) are common year- round residents of mature conifer forest, and all likely nest in the area. Both the Hammond's flycatcher (*Empidonax hammondi*) and winter wren (*Troglodytes troglodytes*) are common in old- growth cedar- hemlock forest and may nest near the site.

METHODOLOGY

This section is intended to augment the impact analysis for natural systems and processes, by analyzing specific impacts of the proposed management alternatives upon federally listed threatened, endangered, and other sensitive species. The Montana Natural Heritage Data Management System (University of Montana) was consulted on the Internet to generate a list of threatened and endangered species, and "species of concern" for Flathead County, Montana. This list was compared to the wildlife database for Glacier National Park and the project area. The Roberts Cabin location was compared to known sensitive species distribution records and habitat types in order to assess potential impacts. The predicted intensity of adverse impacts is articulated according to the following criteria:

- Negligible:* The alternative would affect an individual of a listed species or its critical habitat, but the change would be so small that it would not be of any measurable or perceptible consequence to the protected individual or its population. Negligible effect would equate with a "no effect" determination in U.S. Fish and Wildlife Service terms.
- Minor:* An individual(s) of a listed species or its critical habitat would be affected, but the change would be small. Minor effect would equate with a "may affect, not likely to adversely affect" determination for the species in U.S. Fish and Wildlife Service terms and would require informal consultation.
- Moderate:* An individual or population of a listed species, or its critical habitat would be noticeably affected. The effect could have some long-term consequence to individuals, populations, or habitat. Moderate effect would equate with a "may affect" determination in U.S. Fish and Wildlife Service terms and would be accompanied by a statement of "likely..." or "not likely to adversely affect" the species and would require either informal or formal consultation.
- Major:* An individual or population of a listed species, or its critical habitat, would be noticeably affected with a vital consequence to the individual, population, or habitat. Major effect would equate with a "may affect, likely to adversely affect" or "not likely to adversely affect" determination in U.S. Fish and Wildlife Service terms and would require formal consultation.
- Short-term:* After implementation, would recover in less than 1 year.
- Long-term:* After implementation, would take more than 1 year to recover or effects would be permanent.

IMPACT ANALYSIS

IMPACT ANALYSIS OF THE NO ACTION ALTERNATIVE

Bald Eagle. The removal of the deck around the cabin could temporarily disturb bald eagles that forage in the area. However, if deck removal work is conducted in the late summer/early fall, when human activities have already displaced some wildlife and species like the bald eagle, impacts would be minimized and the work should only take one to two days.

Species of Concern. If work were conducted in September, nesting birds would not be impacted as young birds would have already fledged. Species such as wolverines and fishers are unlikely to be present because of consistent human presence and activity. The pileated woodpecker (*Dryocopus pileatus*), three-toed woodpecker (*Picoides tridactylis*), and brown creeper (*Certhia americanus*) may be disturbed during the deck removal, however, human disturbance in the area may have already affected their behavior and movements. No other actions are proposed that would disturb sensitive species in the area.

The overall impact would be **negligible, short-term, site-specific, and adverse** to bald eagles

and other sensitive species in the area.

Cumulative Impacts of the No Action Alternative

Most of the cumulative impact projects have the potential to impact bald eagles and other sensitive species in the area. However, they are mostly conducted in the Lake McDonald Lodge developed area during the visitor season when human presence discourages wildlife use of the area. Hazard tree management activities at Lake McDonald Lodge have removed many of the snags previously used by bald eagles foraging in the area and eagles would be discouraged from using the snag in front of the cabin during deck removal. In conjunction with the No Action Alternative, these projects would have **minor, short- term, local, adverse** impacts in the project area on bald eagles sensitive species. The No Action Alternative would be adding only negligibly to this level of impact.

IMPACT ANALYSIS OF THE PREFERRED ALTERNATIVE

Bald Eagle. Some perch trees near the cabin are used by bald eagles for foraging. Eagles would probably not use these perches or forage in the vicinity when demolition is occurring. Conducting the work in September would minimize impacts since the nest would no longer be active and eagles that frequent the area in late fall/winter would not be impacted. If cabin removal were to be carried out between June and August, nesting or fledgling eagles may be disturbed and sustain a **minor, short- term or long- term, site- specific, adverse** impact. The removal of several trees from the road side of the cabin would not impact eagles as the trees are too small to be important perch or forage trees. Overall impacts from cabin removal on bald eagles would be **negligible, short- term, site- specific, and adverse** if demolition occurs in September. The revegetation of the cabin site would have a **negligible, long- term, site- specific, beneficial** impact on bald eagles as the site would produce perch and forage trees along the lakeshore.

Species of Concern. If work were conducted in September, nesting birds would not be impacted as nestlings would have already fledged. Species such as wolverines and fishers are unlikely to be present because of consistent human presence and activity. The pileated woodpecker (*Dryocopus pileatus*), three- toed woodpecker (*Picoides tridactylis*), and brown creeper (*Certhia americanus*) may be disturbed during cabin removal, however, human disturbance in the area may have already affected their behavior and movements.

Cumulative Effects of the Preferred Alternative

Visitor recreational activities, construction activities, and concession activities, conducted in the Lake McDonald Lodge developed area during the visitor season currently discourage wildlife use of the area. Hazard tree management activities at Lake McDonald Lodge have removed many of the snags previously used by bald eagles foraging in the area and eagles would be discouraged from using the snag in front of the cabin during the cabin removal. The Roberts Cabin removal would contribute a negligible, long- term, site- specific beneficial impact on threatened, endangered, and sensitive species in the analysis area, but this beneficial impact would not change the cumulative impact of minor, long- term, local cumulative impacts to these species. The cumulative impacts of other projects, human activity and development in the analysis area with the Action Alternative would remain **minor, short- term, local, adverse** impacts on threatened, endangered, and sensitive species. The Preferred Alternative would be adding only negligibly to this level of impact.

Conclusion

The No Action Alternative would result in **negligible, short- term, site- specific, adverse** impacts due solely to the removal of the cabin's deck. Cumulative impacts would be **minor, short- term, local, and adverse** in the project area and the No Action Alternative would not add to this level of cumulative impact. The Preferred Alternative, if demolition occurs in September, would cause **negligible, site- specific, short- term, adverse** impacts due to noise

disturbance for the period of demolition, and would provide **negligible, long-term, site-specific, benefits** from conversion of a building site to native vegetation. The Preferred Alternative would have no impact on gray wolves, grizzly bears, Canada lynx, bull trout, or other listed Species of Concern. Cumulative impacts of the Preferred Alternative would be **minor, short-term, local, and adverse** in the project area with cabin removal.

Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation and proclamation of Glacier National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the park's resources or values.

Visitor Use and Experience

AFFECTED ENVIRONMENT

In the past ten years, Glacier National Park visitation has ranged between 1.7 and 2.1 million. The highest recorded visitation was 2,204,131 for 1983. Visitation has fluctuated over the years but the number of visitors has steadily increased since the park opened in 1911. There were 1,925,100 recreational visits in 2005 and 1,964,399 in 2006. We expect that visitation will continue to increase a few percent points per year in the future. While increases in visitation are expected to occur annually, variables such as forest fires, floods, inclement weather, and travel costs may reduce visitation in a given year.

A 2001 visitor use survey in Glacier National Park found that visitors came to the park for a variety of reasons. Viewing the scenery was the primary reason 63 % of visitors visited the park; 16 % wanted recreational activities such as hiking, boating, biking and camping; 5% wanted to experience a change from their "normal routine"; 4% wanted to enjoy socializing with family or friends; 3% came to view wildlife; 2% came to take photographs; and 7% cited other reasons for visiting the park (MK Centennial 2001b). This survey was conducted in the summer months. The same survey showed that 63% of respondents visited the Lake McDonald area of the park.

Lake McDonald is only three miles inside the West Entrance of the park and is the largest lake in the park. Lake McDonald is a very popular destination where visitors can use hand propelled or motor boats. In this area, visitors are able to view the unparalleled mountain and lake scenery that makes Glacier National Park world- renowned. Visitors recreating on the lake are likely to see the historic cabins and Lake McDonald Lodge along the northeast lakeshore. The Lake McDonald Lodge is the most visible structure on the lakeshore in this area. The historic buildings in the area give visitors a visual depiction of recreational camp and lodge styles representative of Glacier's history as a summer vacation destination. The south entrance of the Lake McDonald Lodge Road, where the Roberts Cabin is located, is not regularly used as an entrance to the Lake McDonald Lodge and surrounding amenities. This peripheral road was the original alignment for the Going to the Sun Road and the access road for Glacier Park Villa Sites. Very few visitors see the Roberts Cabin from the road.

METHODOLOGY

An important part of the National Park Service mission is the provision for public use and enjoyment of the National Parks. Public use and experience is a difficult topic to analyze, as it is highly subjective and based on individual perspective. Public use and experience is dependent on the impacts to important features and values as they relate to an individual's experience. This analysis is largely qualitative and may not speak to the unique experience expectations that individuals want to incorporate into their unique visits.

Visitor surveys and personal observation of visitation patterns combined with assessment of what is available to visitors under current management were used to estimate the effects of the actions in the various alternatives. The impact on the ability of the visitor to experience a full

range of park resources was analyzed by examining resources mentioned in the park significance statement. The following definitions are used to define intensity levels:

<i>Negligible:</i>	Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. Any effects would be short- term. The visitor would not likely be aware of the effects associated with the alternative.
<i>Minor:</i>	Changes in visitor use and/or experience would be detectable, although the changes would be slight and likely short- term. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.
<i>Moderate:</i>	Changes in visitor use and/or experience would be readily apparent and likely long- term. The visitor would be aware of the effects associated with the alternative and would likely be able to express an opinion about the changes.
<i>Major:</i>	Changes in visitor use and/or experience would be readily apparent and have important long- term consequences. The visitor would be aware of the effects associated with the alternative and would likely express a strong opinion about the changes.
<i>Short- term</i>	Occurs only during project implementation or one month.
<i>Long- term</i>	Occurs for more than one month or is permanent.

IMPACT ANALYSIS

IMPACTS OF THE NO ACTION ALTERNATIVE

The No Action Alternative would have a minor impact on visitor use and experience. The building would be allowed to deteriorate which may not be a beneficial for people who enjoy looking at historic cabins on Lake McDonald. The Roberts Cabin would deteriorate and become increasingly more decrepit, detracting from the views of the lakeshore in this area. The peripheral materials, utility lines, retaining walls, and cement blocks would remain in the area and the cabin would be in a continuous state of neglect. While this is not a high visitor use area, visitors would see the poor condition of the cabin if they were looking at the cabin from the lake. The No Action Alternative would have a **minor, long- term, site- specific, adverse** impact on visitor use and experience.

Cumulative Effects of the No Action Alternative

All of the projects that provide access, improve facilities, increase visitor opportunities, provide for visitor safety, maintain facilities, and provide services have a cumulative **moderate, long- term, localized, beneficial** impact overall in the analysis area. Other historic buildings are kept in good condition, giving visitors the experience of styles and buildings in historic districts around the Roberts Cabin. The No Action Alternative would add a **long- term, negligible, site- specific, adverse** impact on visitor use and experience due to the deterioration of the cabin and the safety hazards present in and around the cabin. The No Action Alternative would contribute an adverse impact to visitor use and experience; however, it is not enough of an impact to change the overall cumulative impact to visitor use and experience of **moderate, long- term, localized, and beneficial**.

IMPACTS OF THE PREFERRED ALTERNATIVE

The cabin removal activities would have a direct short- term, minor, site- specific, adverse impact on visitors wanting to travel along the south entrance of the Lake McDonald road. This section of road would be closed for the duration of the project. The road closure would not affect visitors traveling to the Lake McDonald Lodge area on the Going to the Sun Road. This closure would occur in September and would not affect many visitors. Visitors on the lake or near the project would experience noise and disturbance as direct impacts of the cabin removal.

The cabin removal and site restoration is expected to have opposite impacts on visitors with

different perspectives. The cabin removal would be a **minor, long- term, site- specific, adverse** impact for people who are interested in viewing historic lakeshore cabins and recreational camps. The cabin removal and site restoration would have a **minor, long- term, site- specific, beneficial** impact for people who like natural views, unimpeded by human development. Visitors would likely not know that a cabin had previously stood in the Roberts Cabin location if they visited after the cabin removal. The cabin removal would have a **minor, long- term, site- specific, adverse or beneficial** (depending on perspective) impact on visitor use and experience.

Cumulative Effects of the Preferred Alternative

The Roberts Cabin removal would have a minor, long- term, site- specific, adverse or beneficial impact on visitor use depending on whether the visitor is interested in looking at historic cabins. The removal would reduce human development along the lakeshore in the project area and provide natural views of mountain and lake scenery on Lake McDonald. All of the projects that provide access, improve facilities, increase visitor opportunities, provide for visitor safety, maintain facilities, and provide services have a cumulative **moderate, long- term, localized, beneficial** impact overall. The removal of the Roberts Cabin would contribute to the cumulative beneficial impacts to visitor use and experience. While some visitors want less human development and consider these projects as an adverse cumulative impact, most visitors benefit from the cumulative projects listed above.

Conclusion

The No Action Alternative would have a **minor, long- term, site- specific, adverse** impact on visitor use and experience. The No Action Alternative would have a **long- term, negligible, site- specific, adverse** impact on visitor use and experience in conjunction with other projects occurring in the analysis area. The Preferred Alternative would have a **negligible, long- term, site- specific, adverse or beneficial** (depending on desire to view historic buildings in this area of the lakeshore) impact on visitor use and experience. The Preferred Alternative would have

Human Health and Safety

AFFECTED ENVIRONMENT

The Roberts Cabin has not been maintained in the past 10 years because the previous landowner's expectation and the NPS's commitment was that the cabin would be removed. Several safety concerns have been identified at the site of the Roberts Cabin. The stairs and deck have begun to rot and the boards are soft and spongy. There is a concern for people sustaining serious injury by falling through the deck or stairs. Rodents have access to the building and years of rodent dropping accumulations present the safety concern of air- borne diseases such as Hantavirus. The deterioration of the building presents inherent safety risks such as building materials falling apart. Furthermore, hazardous materials such as asbestos and lead paint have not been identified and may be present. The deteriorating building may attract curious children or adult visitors who are at risk of exposure to rodent- borne diseases, hazardous materials, or injury from unsafe conditions. Park employees working on the building may be susceptible to risk or injury when working on or near the building.

METHODOLOGY

Safety concerns are continuously being identified within the park. Specialists were consulted in identification of health and safety issues at the Roberts Cabin. The NPS has committed to make the workplace and public areas safe. The safety concerns at the Roberts Cabin have been identified and various NPS plans have detailed risk management and avoidance procedures. Once identified, the risks are mitigated by limiting human exposure. The following definitions are used to define intensity levels:

Negligible: Health and safety would not be affected, or the effects would not be noticeable.

<i>Minor:</i>	The effect would be detectable, but would not have an appreciable effect on health and safety.
<i>Moderate:</i>	The effects would be readily apparent, and would result in a substantial change in health and safety in a manner noticeable to staff and the public.
<i>Major:</i>	The effects would be readily apparent, would result in a substantial change in health and safety in a manner noticeable to staff and the public, and be markedly different from existing operations.
<i>Short- term</i>	Effects last for the duration of the project
<i>Long- term</i>	Effects last longer than the duration of the project

IMPACT ANALYSIS

IMPACTS OF THE NO ACTION ALTERNATIVE

Human health and safety risks would continue to be associated with the Roberts Cabin. The failing deck and stairs would be removed, eliminating the safety risks posed by rotting wood. Rodent infestation is expected to continue in the future. The building would be secured to stop the public from being exposed to rodent borne diseases and hazardous materials as the building deteriorates. It is expected that the health and safety risks inherent in the building's deterioration would continue to worsen over time. The safety risks of the No Action Alternative would change slowly and would not be noticeable to humans except by monitoring the condition over time. An uncertain level of future risk reduction to protect the public would have to occur if safety issues emerge with cabin deterioration. The building may attract curious people and the long- term possibility of injury would be present. The overall health and safety impact of the No Action Alternative would be **minor, long- term, site- specific and adverse**.

Cumulative Effects of the No Action Alternative

Most of the projects in the cumulative impacts list above improve health and safety of the public. Actions like the hazard tree removal program, facilities maintenance, Going- to- the- Sun Road Rehabilitation, and utility upgrades have a **moderate, long- term, localized, beneficial** impact on human health and safety. The minor, long- term, site- specific impacts of the No Action alternative would not change the overall cumulative impact on human health and safety.

IMPACTS OF THE PREFERRED ALTERNATIVE

The removal of the Roberts Cabin presents the risk of hantavirus, hazardous materials exposure, and the possibility of injury from removal of building materials to NPS employees doing the work. Most of the risk associated with the cabin removal and site restoration would be mitigated by a job hazard analysis and risk management plan prepared prior to the cabin removal. If established NPS protocol were followed during the cabin removal, very little risk would exist. There would be no risk to the public after the cabin is removed and the site restored to its natural state. The impacts of the Preferred Alternative on human health and safety are **minor, short- term, site- specific, and adverse**. After the cabin is removed the impact on human health and safety would be **minor, long- term, site- specific and beneficial** as the safety hazard would have been removed.

Cumulative Effects of the Preferred Alternative

Most of the projects in the cumulative impacts list above improve health and safety of the public. Actions like the hazard tree removal program, facilities maintenance, Going- to- the- Sun Road Rehabilitation, and utility upgrades have a **moderate, long- term, localized, beneficial** impact on human health and safety. The removal of the Roberts Cabin does not add appreciably to the cumulative impacts on health and safety. Under the Preferred Alternative, a minor, long- term, site- specific, beneficial impact would be added to the other human health and safety

improvements in the Lake McDonald area, but this would not change the overall cumulative impact on health and safety.

Conclusion

The impacts of the Preferred Alternative on human health and safety are **minor, short- term, site- specific, and adverse**. After the cabin is removed the impact on human health and safety would be **minor, long- term, site- specific and beneficial** as the safety hazard would have been removed. The Preferred Alternative would add a minor, long- term, site- specific, beneficial impact on human health and safety that would add cumulatively to the other projects in the analysis area that add a **moderate, long- term, localized, beneficial** impact. The No Action Alternative would have a **minor, long- term, site- specific, adverse** impact on human health and safety because the safety hazard of the cabin would remain in the present location. This impact on human health and safety would not add appreciably to the cumulative moderate, long- term, localized, beneficial impacts of projects in the analysis area.

COMPLIANCE WITH FEDERAL AND STATE REGULATIONS

National Environmental Policy Act (NEPA) and Regulations of the Council on Environmental Quality—The National Environmental Policy Act applies to major federal actions that may significantly affect the quality of the human environment. This generally includes major construction activities that involve the use of federal lands or facilities, federal funding, or federal authorizations.

This Environmental Assessment meets the requirements of NEPA and regulations of the Council on Environmental Quality in evaluating potential effects associated with activities on federal lands. If no significant environmental effects are identified, a finding of no significant impact (FONSI) would be prepared. If significant impacts are identified, then a notice of intent (NOI) would be filed for preparation of an Environmental Impact Statement.

Endangered Species Act of 1973, as amended (16 U.S.C. 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 U.S. Fish and Wildlife Service is required. The NPS determined that the proposed action would have no effect on threatened or endangered species under Section 7. Therefore, a biological assessment has not been prepared. The US Fish and Wildlife Service will be provided an opportunity to review this environmental assessment. However when “no effect” has been determined, no response is required for the USFWS.

Clean Water Act (CWA) and State and Local Water Quality and Floodplain Regulations - This project requires no permits and no work would occur within a floodplain or a waterway. A Statement of Findings will not be prepared.

Executive Order 11990, Protection of Wetlands- The project area was surveyed for wetlands and no wetlands were found. No wetlands would be affected by either alternative according to the USFWS (1992) National Wetland Inventory Mapping. A statement of findings will not be prepared.

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et. seq.)— Section 106 of the National Historic Preservation Act of 1966 (as amended) requires all federal agencies to consider effects from any federal action on cultural resources eligible for or listed on the National Register of Historic Places (NHRP), prior to initiating such actions. Both alternatives would result in an adverse effect under Section 106 of the National Historic Preservation Act. Park Service staff consulted with the Montana State Historic Preservation Officer to develop treatments to mitigate the adverse effect in accordance with 36 CFR 800. A Memorandum of Agreement will be executed committing the park to document the cabin to the standards of the

Historic American Building Survey; exterior maintenance work on the Ewing (Artist- in- Residence) Cabin; and a wayside exhibit interpreting the significance of Lake McDonald cabins.

CONSULTATION/COORDINATION

Preparers and Consultants

Shaun Bessinger, Supervisory Engineering Equipment Operator
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Cory Davis, Environmental Compliance Technician
Jim Foster, P.E., Civil Engineer
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Mary Riddle, Environmental Protection and Compliance Specialist

EA Recipient List

Federal and International

Advisory Council on Historic Preservation
Max Baucus, United States Senate
Flathead National Forest (Kalispell, Hungry Horse)
Premier of the Province of Alberta, Honorable Ed Stelmach
Dennis Rehberg, United States House of Representatives
Jon Tester, United States Senate
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service (Helena and Creston)
U.S. Geological Survey, Biological Resources Division
U.S. Department of the Interior, Office of the Solicitor
Waterton Lakes National Park, Canada

State

Environmental Quality Council, Director, Helena
Montana Department of Environmental Quality, Board of Environmental Review
Montana Department of Environmental Quality Permitting & Compliance, Helena
Montana Department of Environmental Quality, Water Protection Bureau
Montana Department of Environmental Quality, Air Quality Division
Montana Department of Natural Resources and Conservation
Montana Fish, Wildlife, and Parks, Region One Supervisor, Kalispell
Montana State Historic Preservation Office
Brian Schweitzer, Governor of Montana
Stillwater State Forest

Tribal

Earl Old Person, Chair, Blackfeet Tribal Business Council w/copies to Tribal Council and the Blackfeet Tribal Historic Preservation Office
James Steele, Chair, Confederated Salish and Kootenai Tribes of the Flathead Reservation w/copies to Tribal Council and Confederated Salish and Kootenai Tribal Historic Preservation Department

County and City

Chair, Flathead County Board of Commissioners

Glacier County Commissioners
Mayors and City Councils of Browning, Kalispell, Columbia Falls, and Whitefish, MT
Public Libraries: Bigfork, Columbia Falls, Kalispell, Whitefish, MT

Private

Backcountry Horsemen of the Flathead
Friends of the Wild Swan
Glacier National Park Fund
Glacier Natural History Association
Glacier Park Inc.
Glacier Park Foundation
Glacier Raft Company
Glacier Waterton NP Visitor Association
Great Northern Whitewater Resort
Montana Preservation Alliance
Montana Raft Company
Montana Wilderness Association
National Parks Conservation Association
Wilderness Watch
Wild River Adventures

Individuals

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Ralph Thornton	Darlene Wagner
James and Mary Grace Galvin	Mary Agnes Roberts
James K. Johnson	
Ev Lundgren	
Fred Turk	
Karene Manus	
Jim R. Swab	
James R. Conner	
Margaret A. Wright	
Mike J. Banks	
Robert Lucke	
Bill and Sue Price	
John P. Case	
Melissa C. Smith	
Joel G. Vignere	
Richard Robinson	
Joyce G. Vogel	
Eric Kildahl	
Jamie Willows	
Jerry Hill	
Pat and Riley McClelland	
Jack and Reggie Hoag	
Karin Connelley	
Ed Lieser	
Denise Schultz	
Richard Kuhl	
Doug Rigler	
G.G. Crisak	
Franklin Schroeter	

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APPENDIX A: BEST MANAGEMENT PRACTICES

This list is to serve as general guidance for both in- park and contracted maintenance operations and construction type activities in Glacier National Park that would allow fulfilling the basic mission of the National Park Service in a manner that perpetuates the Climate Friendly Parks initiative. They are intended to provide park staff, contractors, and concessionaires basic considerations that minimize ground disturbance, energy consumption, including that from restoration, and the prevention of environmental degradation or unnecessary disturbance during certain activities. These are not intended to replace any type of analysis or mitigation required under the National Environmental Policy Act.

- All construction will be limited to designated area required to complete work; all activity, including vehicle and material use and storage will not be allowed outside predetermined, marked construction/staging zones.
- All areas of disturbance will be rehabilitated.
- Park landscape architect and vegetation specialist will provide direction in grading, groundsculpting and revegetation.
- Disturbance to vegetation and ground will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives.
- Prior to grubbing, all suitable topsoil will be salvaged and stored at a pre- approved site according to park guidelines for later replacement over disturbed area.
- Where possible, and when required, sound snags, selected trees and boulders shall be salvaged and stockpiled per park specifications in designated storage areas for subsequent placement on completed slopes or other disturbed areas as directed.
- Park inspection of all fill, gravel or soil materials into Glacier will be required. Two weeks notice prior to import is necessary. Eradication of weed source or an approved alternative source may be required. The park can provide a list of approved sources if desired.
- All aggregate material sources will require archaeological clearance by a state or federal agency. The written proof shall be satisfactory to the State Historic Preservation Office for meeting regulations on Section 106 of the National Historic Preservation Act.
- All earth- moving equipment including haul vehicles shall be thoroughly cleaned of mud and weed seed prior to entering the National Park. Inspection will be required for initial entry. Subsequent entries will not require cleaning unless requested.
- Only certified weed- seed free straw or coir bales will be permitted as erosion control or siltation devices to reduce probability of weed contamination. In addition, coconut silt rolls and fabric silt fences are allowed depending upon site constraints. The installation of erosion control is the first order of business upon beginning work.
- Where trenching operations and line installation has occurred, the surface of the trench will be left adequately mounded to allow for ground settling along the line.
- Revegetation (including post construction monitoring where applicable) and exotic plant control funding shall be considered as a funded requirement in any construction project. In accordance with Glacier's genetic guidelines, only seeds and plants originating from the park will allowed in restoration activities.
- Unless specifically stipulated, revegetation and exotic plant control are the responsibilities of Glacier National Park and project funding must include provisions for these activities. Disturbed sites shall be left in a 'plant- ready' condition by the contractor. This includes

contractor removal all rocks and boulders, scarifying compacted ground and topsoil application per park guidelines, so that the site is ready for seeding and planting.

- Cleanliness at the jobsite is mandatory as food and garbage can attract and habituate wild animals. Plastic or string can be ingested or ensnare wildlife. Trash can be wind- distributed far from the jobsite. Recycling will be the first choice for waste. All workers will follow required food storage guidelines.
- If garbage cans are needed, certified bear- proof garbage containers will be required. This needs to be pre- determined on a project basis. Collection is usually the responsibility of the contractor.
- Clean rest room facilities are required. This needs to be determined on a project basis. Provision for porta- potties may be required.
- If fuels and hazardous materials are used, a spill- protection plan is a project requirement. The plan needs to be reviewed by the Park Safety Officer for comment and approval.
- Work planning should address energy conservation measures including trips to the worksite and equipment efficiency to help meet the goal of minimizing GHG emissions.

Guidance is available from the office of the Landscape Architect, Engineers and Horticulturist

APPENDIX B

DRAFT MEMORANDUM OF AGREEMENT SUBMITTED TO THE MONTANA STATE HISTORIC PRESERVATION OFFICER PURUANT TO 36 CFR 800

WHEREAS, Glacier National Park (Park) has determined that demolition of the Roberts Cabin will have an effect on the Roberts Cabin, a property contributing to the significance of the Glacier Park Villa Sites Historic District, a district eligible for listing in the National Register of Historic Places, and the Park has consulted with the Montana 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. 470f); and

WHEREAS, Glacier National Park has notified the Advisory Council on Historic Preservation (Council) of the adverse effect finding and the Council has chosen not to join the consultation; and

NOW, THEREFORE, Glacier National Park and the Montana State Historic Preservation Officer 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

Glacier National Park will ensure that the following measures are carried out:

1. Prior to demolition, the Park will record the cabin to the standards of the Historic American Buildings Survey.
2. The Park will install a wayside exhibit at a location around Lake McDonald that will interpret the history and significance of recreational cabin development on the lake.
3. The Ewing (Artists- in- Residence) Cabin in the Glacier Park Villa Sites Historic District will be painted.

Administrative Conditions

1. If any Stipulations have not been implemented within two (2) years after execution of this agreement, the parties to this agreement shall review this agreement to determine whether revisions are needed. If revisions are needed, the parties to this agreement will consult in accordance with 36 CFR Part 800 to make such revisions.
2. Should any party to this agreement object within thirty (30) days after receipt to any plans provided for review pursuant this agreement, or to the manner in which this agreement is being implemented, Glacier National Park shall consult with the objecting party to resolve the objection. If Glacier National Park determines that the objection cannot be resolved, Glacier National Park shall forward all documentation relevant to the dispute to the Council. Glacier National Park will take into account the Council's recommendations in reaching a final decision regarding the dispute.

Execution of this Memorandum of Agreement by Glacier National Park and the Montana State Historic Preservation Officer and implementation of its terms, evidence that Glacier National Park has afforded the Montana State Historic Preservation Officer an opportunity to comment on the Roberts Cabin Demolition and its effects on historic properties, and that Glacier National Park has taken into account the effects of the undertaking on historic properties.

Glacier National Park

By: _____
Michael O. Holm, Superintendent

Date: _____

Montana State Historic Preservation Officer

By: _____

Date: _____

Mark Baumler, Ph.D.