National Park Service
U.S. Department of the Interior

Grand Portage National Monument
Minnesota

Grand Portage Maintenance Facility and Seasonal Housing

Environmental Assessment

September 2009

Prepared for Grand Portage Reservation Tribal Council

SUMMARY

S.1 DESCRIPTION OF THE PROJECT

The Grand Portage Band of Minnesota Chippewa (Ojibwe, also spelled Ojibwa) (the Band) and the U.S. Department of the Interior (DOI) National Park Service (NPS) are proposing to construct a maintenance facility, including an outdoor storage yard, and NPS-staff seasonal housing at Grand Portage National Monument (the Monument or GRPO) in Grand Portage, Minnesota. NPS has a unique relationship with the Band because the Monument is located entirely within the Grand Portage Reservation. The Monument is located at the site of a historic portage. Given its significance as "a fur trade site whose history is integrally related to Native Americans in the past and present," the Monument was designated a national historic site on September 15, 1951. On September 2, 1958 (72 Stat. 1751), it was established as a unit of the NPS to preserve an area containing unique historical values (NPS, 2003).

The purpose of this Environmental Assessment (EA) is to identify and evaluate the potential adverse environmental effects, or impacts, that the proposed action (the Project) would have on the environment. This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA),[1] which requires that Federal agencies analyze the impacts of their actions on the environment.

The existing maintenance facility, the outdoor storage yard for equipment and supplies, and the seasonal housing for NPS staff support the Monument's varied recreational and educational uses. The current facilities have deficiencies that need to be addressed. Not only do they require upgrading, but they are separate from one another and are located on sites that are more suitable for other uses.

The maintenance facility, where NPS vehicles are serviced, has capacity issues and lacks a paved area on which to perform maintenance. The outdoor storage yard, which is used for parking equipment or storing supplies when not needed, is located on a lake-front site approximately 1,400 feet by road from the maintenance facility. The facility and storage yard are both located on Monument land.

The seasonal housing that provides living quarters for NPS staff is on Band land leased by the Monument. Its peak use is from late May to early October, when the reconstructed stockade and buildings are open to the public; there is also occasional winter use, with one or two occupants of the housing for a one-to-three-month duration, depending on the need. A few recreational vehicles (RVs) are parked at this site. The seasonal housing is in need of repairs and is located on lake-front property on Hat Point, across Grand Portage Bay from the current maintenance facility.

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[1] NEPA (42 United States Code [USC] 4321-4347) is the foundation of environmental policy making in the U.S. The NEPA process includes an environmental review early in the planning for proposed actions. The process is intended to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment.

S.2 PURPOSE AND NEED

The purpose of the proposed action is fourfold:

- To address the inadequacies of the current maintenance facility with respect to capacity and provisions for vehicle maintenance.
- To consolidate the maintenance facility and the outdoor storage on a single site.
- To improve the quality of the seasonal housing for the NPS staff.
- To centralize the seasonal housing closer to the Monument.

The proposed action is intended to address the need to correct existing operational issues involving the maintenance facility, the outdoor storage yard, and the seasonal housing.

The need for action is summarized as follows:

- Capacity issues and other inadequacies of the current maintenance facility – The facility consists of four buildings, a gravel parking area, and a gravel-surfaced open area used for vehicle repairs. These buildings are overcrowded and somewhat rundown.
- Unconsolidated NPS resources – Currently, the maintenance facility and the outdoor storage yard are located on separate sites, resulting in a loss of efficiency and inconvenience.
- Poor condition of seasonal housing – The existing housing for NPS staff will soon need substantial repairs and updating, and the deck is likely to need replacement.
- Inappropriate locations of these operational facilities – The maintenance facility is located at the approximate head of the historic Grand Portage Trail (and disturbs the viewshed from the trail). The outdoor storage yard is located in an area with high potential for archaeologically sensitive resources and on prime lake-front property that could be put to a more valuable use. The seasonal housing with RV parking are adjacent to the island boat tour dock (the Voyageur Dock) and are located on prime lake-front real estate that is leased from the Band. Additionally, the location of the housing is distant from NPS facilities, requiring a commute to and from work areas.

S.3 ALTERNATIVES CARRIED FORWARD IN THIS EA

Based on the evaluation of the build alternatives, the Store Road Site Alternative and the Stevens Road Site Alternative are carried forward for further consideration in this EA. In addition, the No-Action Alternative (representing the status quo) was carried forward to serve as a baseline for comparison with the build alternative as required by NEPA (42 USC 4321-4347). The No-Action Alternative and the two build alternatives are discussed below.

S.3.1 Alternative A – No-Action

The No-Action Alternative would continue operations without any changes. As discussed under Purpose and Need, current operations are hindered by inadequacies in the condition and locations of the existing maintenance facility, outdoor storage yard, and temporary housing for seasonal NPS employees:

Under the No-Action Alternative, the existing run-down buildings would continue to be used, and valuable lake-front property that could be put to better use by the Band and the Monument would continue to serve operational purposes rather than promote the Monument's educational and recreational goals.

S.3.2 Alternative B – Store Road Site (Preferred Alternative)

The Store Road Site Alternative was carried forward for further consideration in this EA because it is logistically feasible, meets the purpose of and need for the proposed action, and would have minimal environmental impacts. This alternative is considered to be the Environmentally Preferable Alternative and was identified as the Agency Preferred Alternative.

Approximately 3 acres of land in the area proposed for the Store Road Site have been cleared, and approximately 2 acres of land are needed for the maintenance facility, storage yard, and seasonal housing. Consequently, it is not anticipated that clearing of previously undisturbed area would be required. A drainage ditch off the north edge of the site drains to Grand Portage Creek, and some wetland vegetation is present to the south of the proposed site. If the cleared area is not sufficient, additional archeological and wetland surveys may be needed. A tribal allotment southeast of the site would not be reduced by development of this site. A historic cemetery and a farmstead are located near but outside the proposed site. A former groundwater well that was capped and properly closed is adjacent to the pole barn.

The site would include a maintenance facility with a shop and an office, an equipment/material storage yard for equipment and supplies, and linked dormitory buildings for NPS employees, along with parking lots for staff, residents, and RVs. The access road to the seasonal housing would be limited to use by residents and visitors only. Gravel driveways and parking lots would be installed initially, with the potential for future asphalting of the driveways and parking lots.

The new maintenance facility constructed at this site would be approximately 6,300 square feet in area. The facility would include a storage area for RTC-audited material, vehicle storage, a maintenance garage with a vehicle lift, a wood shop with dust collection, multiple storage areas, a conference/lunch room, restrooms, and concrete aprons. The facility would have shared function by the Band and NPS.

The proposed seasonal housing, approximately 4,000 square feet in area, would consist of two linked dormitory-style buildings, each containing four bedroom units, two bathrooms, and a kitchen and living area. The NPS standard design for dormitory buildings would be used and modified as needed to meet a variety of criteria. The housing would be designed and built according to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) gold or platinum standards,

with attention given to its orientation on the site, energy efficiency, sustainability, and other green building qualities. This would be the first such buildings constructed by the NPS in the region.

S.3.3 Alternative C – Stevens Road Site

The Stevens Road Site Alternative was carried forward for further consideration in this EA because it is on NPS land, is logistically feasible, and meets the Project objectives. However, the site would require construction of an access road on tribal lands and has limitations with respect to utility costs, water and wastewater access, geologic formations, road construction, and the need for clearing vegetation to connect to the necessary services. Blasting and rock removal would likely be required for utility construction and site leveling at the Stevens Road Site. Although there is a cleared area with an abandoned power line corridor south of the Cemetery Access Road, access road construction would not be feasible because of the topography of this area. Access to the site from the east or southeast would also not be feasible because of natural stone outcroppings and slopes. The access road construction could have an impact footprint comparable in size to the site itself. The facilities constructed on the Stevens Road Site would be the same as those at the Store Road Site.

S.4 POTENTIAL IMPACTS

Potential impacts of Alternative A – No-Action, Alternative B – Store Road Site, and Alternative C – Stevens Road Site are summarized in Table S-1 for each impact topic retained for analysis.

Table S-1
Summary of Impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Public Health and Safety	Minor to Potentially Moderate Impact	Minor Short-term Adverse Impact	Minor Short-term Adverse Impact
Socioeconomics	Negligible Regional Impact	Minor Beneficial Impact	Minor Beneficial Impact
Environmental Justice	No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations	No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations	No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations
Other Agency or Tribal Land Use Plans or Policies	No Effect	Negligible Impact	Negligible Impact
Cultural Resources	No Effect/No Impact	No Effect/No Impact on Historic Properties	No Effect/No Impact on Historic Properties
Sacred Sites	No Effect or Cumulative Impact	No Effect or Cumulative Impact	Minor Long-term Adverse Impact
Indian Trust Resources	Minor Long-term Adverse Impact	Minor Long-term Impact (potentially beneficial)	Minor Long-term Adverse Impact
Wildlife and Habitats	No Impact	Negligible Adverse Impacts	Minor Adverse Impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Endangered, Threatened, or Protected Species, and Critical Habitats	No Effect/No Impact	No Effect/No Impact	May Affect But Not Likely To Adversely Affect/Minor Negligible Impact
Vegetation	No Impact	Minor Beneficial Long-term Impacts	Minor to Moderate Long-term Adverse Impact
Air Quality	Negligible Adverse	Minor Adverse	Minor Adverse
Soundscape Management	Minor Impact	No Long-term Impact	Minor to Moderate Long-term Adverse Impact
Water Quality	Negligible Adverse	Minor Adverse	Minor Adverse

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ACRONYMS, ABBREVIATIONS, AND SHORT FORMS

ATV	all-terrain vehicle
Band	Grand Portage Band of Minnesota Chippewa
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EPA	U.S. Environmental Protection Agency
et seq.	*et sequentia* (and the following)
FR	Federal Register
GRPO	Grand Portage National Monument
LEED	Leadership in Energy and Environmental Design
LUST	leaking underground storage tank
Minn. 61	Minnesota State Highway 61
MnDNR	Minnesota Department of Natural Resources
Monument	Grand Portage National Monument
MPCA	Minnesota Pollution Control Agency
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
PHMSA	Pipeline and Hazardous Materials Safety Administration
Project Area	the area in which the proposed facilities would be constructed
RTC	Reservation Tribal Council
RV	recreational vehicle
SHPO	State Historic Preservation Office
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

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CHAPTER 1

PURPOSE AND NEED

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1.1 INTRODUCTION

The Grand Portage Band of Minnesota Chippewa (Ojibwe, also spelled Ojibwa) (the Band) and the U.S. Department of the Interior (DOI) National Park Service (NPS) are proposing to construct a maintenance facility, including an outdoor storage yard, and NPS-staff seasonal housing at Grand Portage National Monument (the Monument or GRPO) in Grand Portage, Minnesota. NPS has a unique relationship with the Band because the Monument is located entirely within the Grand Portage Reservation. The Monument is located at the site of a historic portage. "As a portage, company headquarters, transshipment point, and trading post, Grand Portage has had a rich and important history" (White, 2004). Given its significance as "a fur trade site whose history is integrally related to Native Americans in the past and present," the Monument was designated a national historic site on September 15, 1951. On September 2, 1958 (72 Stat. 1751), it was established as a unit of the NPS to preserve an area containing unique historical values (NPS, 2003).

The purpose of this Environmental Assessment (EA) is to identify and evaluate the potential adverse environmental effects, or impacts, that the proposed action (the Project) would have on the environment. This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA),[1] which requires that Federal agencies analyze the impacts of their actions on the environment.

The following includes a description of the Monument and the area in which the proposed facilities would be constructed (the Project Area) as well as background information on the Project.

1.1.1 Grand Portage National Monument

The Monument consists of nearly 710 acres within the 57,000-acre Grand Portage Indian Reservation located about 7 miles south of the border of the United States and Canada. Its boundaries are the Grand Portage Indian Reservation on the north and south, Lake Superior on the east, and the Pigeon River and Canada on the west (NPS, 2003).

The purpose of the Monument is "to delineate, commemorate, and preserve a premier site and route of the 18th century fur trade" as well as "to work with the … Band in preserving and interpreting the heritage and lifeways of the Ojibwe people." The Monument tells the story of the trading between the North West company, "a pioneering, multinational business that exerted powerful political influence" and the ancestors of today's residents of the Grand Portage Indian Reservation 200 years ago or more. It marks the earliest of

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the fur trade sites in the national park system, "the only site concerned with the French and subsequent British colonial period," and … the fur trade site most involved in western exploration" (NPS, 2003).

The Monument includes the entire length of the Grand Portage, an 8.5-mile footpath that was the most direct route from the Great Lakes into the interior of North America." Bypassing waterfalls and rapids on the last 20 miles of the Pigeon River before flowing into Lake Superior, the Grand Portage links Lake Superior with "westward systems of lakes, rivers and interior trading posts which eventually reached the Arctic Beaufort Sea and the Pacific Ocean." The portage served as a gateway for exploration, trade and commerce. Indian Nations referred to it as "the Great Carrying Place" and used it as early as 2,000 years ago to travel from the north shore of Lake Superior to their winter hunting grounds in the interior of what is now Minnesota and Ontario (NPS, 2003).

In keeping with its mission statement, the Monument "protects, commemorates, and interprets a reconstructed fur depot of the North West Company, a rendezvous site for international commerce and canoe route for transcontinental exploration, Native heritage, natural scene, and history of cross cultural contact and accommodation between traders, Ojibwa, and other participants in the fur trade" (NPS, 2003). Structures at the Monument (a palisade, a hand-hewn log great hall with adjoining kitchen, and a nearby canoe warehouse and Indian village) have been reconstructed based on archaeological excavations and research. These structures are located in the eastern, or lakeshore, district of the Monument. A Heritage Center, overlooking the reconstructed trading post, has also been constructed to house exhibit galleries, a bookstore, multi-media programs, park offices, archives, and a classroom. Interpretive programs as well as demonstrations of Ojibwe craft and the technology from the late 1700s recreate the history of the area. In addition to the regularly scheduled programs and activities, special events provide varied cultural experiences (NPS, April 19, 2006).

1.1.2 The Project Area

Located at the extreme northeast part of Minnesota (the "Tip of the Arrowhead"), in Cook County, the Monument is approximately 150 miles northeast of Duluth, Minnesota, and approximately 50 miles southwest of Thunder Bay, Ontario, Canada (see Figure 1-1, General Vicinity Map). The park entrance is 0.5 mile east of Minnesota State Highway 61 (Minn. 61), which traverses the Monument near Lake Superior in a northeasterly direction.

The ecosystem in this area is categorized as northern woodlands. The Monument is on the southern edge of the North American Boreal Forest, which stretches from interior Alaska across Canada to the Atlantic Ocean. The terrain includes old beach ridges and erosional bluffs near Lake Superior.

The eastern-most area of the Monument as it exists today is shown in Figure 1-2, General Project Area. Within this general area, two approximately 2-acre parcels have been identified as alternative sites of the proposed maintenance facility and seasonal housing buildings.

General Vicinity Map

Grand Portage Maintenance Facility and Seasonal Housing EA

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FIGURE
1-1

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800 400 0 800

Feet

Scale

HDR

General Project Area

Grand Portage Maintenance Facility and Seasonal Housing EA

DATE

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FIGURE

1-2

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One of the sites is located on tribal lands; the other is located on Monument lands but would require an approximately 300-foot-long access and utility corridor across tribal lands. (See Chapter 2, Alternatives, for a discussion and evaluation of the two alternative sites).

1.1.3 Project Background

The existing maintenance facility, the outdoor storage yard for equipment and supplies, and the seasonal housing for NPS staff support the Monument's varied recreational and educational uses. As addressed in Section 1.3, Need, below, the current facilities have deficiencies that need to be addressed. Not only do they require upgrading, but they are separate from one another and are located on sites that are more suitable for other uses (see Figure 1-2 for the locations of these facilities).

The maintenance facility, where NPS vehicles are serviced, has capacity issues and lacks a paved area on which to perform maintenance. Additionally, there is no indoor area for vehicle maintenance. The outdoor storage yard, which is used for parking equipment or storing supplies when not needed, is located on a lake-front site approximately 1,400 feet by road from the maintenance facility. The facility and storage yard are both located on Monument land.

The seasonal housing that provides living quarters for NPS staff is on Band land leased by the Monument. Its peak use is from late May to early October, when the reconstructed stockade and buildings are open to the public; there is also occasional winter use, with one or two occupants of the housing for a one-to-three-month duration, depending on the need. A few recreational vehicles (RVs) are parked at this site. The seasonal housing is in need of repairs and is located on lake-front property on Hat Point, across Grand Portage Bay from the current maintenance facility.

1.2 PURPOSE

The purpose of the proposed action is fourfold:

- To address the inadequacies of the current maintenance facility with respect to capacity and provisions for vehicle maintenance.
- To consolidate the maintenance facility and the outdoor storage on a single site.
- To improve the quality of the seasonal housing for the NPS staff.
- To centralize the seasonal housing closer to the Monument.

1.3 NEED

The proposed action is intended to address the need to correct existing operational issues involving the maintenance facility, the outdoor storage yard, and the seasonal housing (see Figure 1-2, General Project Area, for the current locations of these facilities as well as the two alternative sites for relocating these facilities).

The need for action is summarized as follows:

- Capacity issues and other inadequacies of the current maintenance facility – The facility consists of four buildings, a gravel parking area, and a gravel-surfaced open area used for vehicle repairs. The four buildings (listed from south to north) are a small building for gas and oil storage, a slightly larger building for smaller tools and all-terrain vehicles (ATVs), a large building that hosts a shop used for maintenance and mechanical repairs and also includes office space, and a back building used for woodworking and storage. These buildings are overcrowded and somewhat rundown (see Figure 1-3, Photograph of Current Maintenance Facility). The foundation of the large maintenance building rests on exposed rock, and the maintenance building shop is not in compliance with current building code. The office space has been largely abandoned in favor of new space at the Heritage Center, and the current restroom facility is of extremely low quality. Although no obvious signs of contamination are present, the unpaved area for vehicle maintenance is not adequate to prevent pollutants such as motor oil from entering into the ground- and surface water.
- Unconsolidated NPS resources – Currently, the maintenance facility and the outdoor storage yard (see Figure 1-4, Photograph of Current Outdoor Storage Yard) are located on separate sites, resulting in a loss of efficiency and inconvenience.
- Poor condition of seasonal housing – The existing housing for NPS staff will soon need substantial repairs and updating, and the deck is likely to need replacement (see Figure 1-5, Photograph of Current Seasonal Housing).
- Inappropriate locations of these operational facilities – The maintenance facility is located at the approximate head of the historic Grand Portage Trail (and disturbs the viewshed from the trail). The outdoor storage yard is located in an area with high potential for archaeologically sensitive resources and on prime lake-front property that could be put to a more valuable use. The seasonal housing with RV parking are adjacent to the island boat tour dock (the Voyageur Dock) and are located on prime lake-front real estate that is leased from the Band. Additionally, the location of the housing is distant from NPS facilities, requiring a commute to and from work areas.

Figure 1-3
Photograph of Current Maintenance Facility

Existing Maintenance Facility and Parking Lot, Looking North

Figure 1-4
Photograph of Current Outdoor Storage Yard

Existing Outdoor Storage Yard for Equipment, Vehicles, and Materials

Figure 1-5
Photograph of Current Seasonal Housing for NPS Staff

Rear of Existing Seasonal Residence, Looking North

1.4 PROJECT PLANNING AND SCOPING

To identify the range of actions, alternatives, and impacts to be considered during the environmental analysis for the Project, the Band and NPS held a public scoping meeting on June 4, 2009, at the Reservation Tribal Council (RTC) office in Grand Portage, Minnesota. The meeting provided information about the Project to the public and was a means of gathering public input to be considered during preparation of the EA. Notices were posted, inviting residents and other interested parties to attend and present relevant comments and questions. A second, informal scoping meeting was held on June 12, 2009 at the Elderly Nutrition Center in response to a request from a Band elder. For further information, see Chapter 4, Consultation and Coordination.

The meeting participants identified issues that were used to help determine which impact topics to retain for discussion in this EA (see Section 1.5.1) and which to dismiss from further analysis (see Section 1.5.2).

1.4.1 Relationship to Other Grand Portage National Monument Plans

The proposed construction of a new maintenance facility and NPS seasonal housing is a part of the NPS commitment to preserve Monument resources. The Project would not conflict with any other ongoing or planned projects within the Monument. There are no planned land-disturbing projects within the Monument, and the State of Minnesota is reducing its easements in the area.

1.5 IMPACT TOPICS

Impact topics are human and natural resources that have the potential to be affected by the Project. During early Project planning, impact topics for the Project were identified using guidance from legislative requirements, *Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS, January 8, 2001), and Monument-specific information. Impact topics retained for use in evaluating the Project and those dismissed from further analysis in this EA are discussed below.

1.5.1 Impact Topics Retained

The Project has the potential to impact the human environment, including public health and safety, socioeconomics, and cultural resources.

In addition to impacts on the human environment, the Project has the potential to impact the natural resources of the Monument, including wildlife and habitats; endangered, threatened, or protected species; vegetation; air quality; water quality; and waters of the U.S.

These and other relevant impact topics will be discussed in detail in Chapter 3, Affected Environment and Environmental Consequences, along with the regulations and policies that pertain to each impact topic.

1.5.2 Impact Topics Dismissed from Further Analysis

The impact topics discussed below have been dismissed from further analysis based on the rationale given for each impact topic. These impact topics will not be discussed further in this EA.

Land Use

The Store Road Site is currently being used by the Band for construction material storage, and construction vehicles continually travel through the site. Along with construction material storage, the Project Area is utilized as a multipurpose storage area; a pole barn is present on the site and stores a variety of materials. The site has been cleared and graded, but the grading is not to building standards. To the East of the Project Area is Store Road, to the south and west is forested terrain, and Grand Portage Trust Lands and Resources have their natural resources, forestry and maintenance facilities just north of the site. The Project area would require approximately 2 acres of land for facilities, parking lots, and roads, and there are approximately 3 acres of cleared land on the site. Consequently, minimal clearing of existing vegetation would be required. With the proposed Project, the functions of the area would remain the same as they are today.

The existing Stevens Road Site is forested with no development. The proposed development of the maintenance and housing facilities would require clearing approximately 2 acres of forest, and additional clearing of another 2 acres would be necessary for the construction of the access road extending south from Stevens Road. There would be change in the current unused function of the area if the Project were constructed on this site.

The construction of the maintenance/garage facility and linked dormitory buildings is not anticipated to result in any induced commercial development. While the Project would result in increased residence and traffic in the immediate area adjacent to the Store Road

and Stevens Road sites, it is located in the middle of a National Monument in an isolated area and thus development would be minimal. Consequently, any adverse impacts on land use would be negligible, and land use was dismissed as an impact topic.

Prime and Unique Farmland

On August 11, 1980, the Council on Environmental Quality (CEQ) directed that Federal agencies assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture, Natural Resources Conservation Service as prime or unique (45 Federal Register [FR] 59189). Prime farmland is defined as soil that particularly produces general crops such as common foods, feed, forage, fiber, and oilseed; unique farmland produces specialty crops such as fruits, vegetables, and nuts.

Upland soils (Quetico Series) are formed from glacial till and are shallow to bedrock. The Quetico Series can be found mostly in mixed deciduous and coniferous forests, and major resource uses include recreation, timber, watershed, and wildlife habitat. Lowland soils have deeper soils (Ontonagon Series) and can be characterized as silty clay loam. Native vegetation associated with the Ontonagon Series includes American basswood, eastern white pine, white spruce, and yellow birch. The primary use of the Ontonagon Series is timber and permanent pasture, with a small use in legume crop production. (Heritage Center EA 2009). The soil type at the Store Road and Stevens Road sites are predominately sandy loam and gravelly-sandy loam. Soils in the area tend to be shallow, stony, acidic, low in organic matter, and infertile. The soil characteristics of the proposed Store Road and Stevens Road sites are not consistent with typical prime and unique farmland soils. Consequently, any adverse impacts on prime and unique farmland would be negligible, and prime and unique farmland was dismissed as an impact topic.

Urban Quality and Gateway Communities

The Monument is located in a predominantly rural area. Therefore, the Project would have no effect on urban quality or gateway communities; as a result, urban quality and gateway communities was dismissed as an impact topic.

Visitor Use and Experience

Visitation at Grand Portage National Monument has slightly increased in recent years. In 2008, annual visitation was approximately 77,323; this represents a 23 percent increase from 2004 visitation. Recent visitation was 68,856 in 2007, 54,005 in 2006, 63,311 in 2005, and 62,815 in 2004. The Monument is open year round with peak visitation usually occurring during the months of May through October. Most visitors travel at least an hour to reach the Monument and a majority of the visitors come from Minnesota and visitors that are not from Minnesota are generally from the Mid-west region (GP Long-Range Interpretive Plan 2005).

Visitors to the Monument have the opportunity to partake in a wide range of both educational and entertainment experiences. Visitors have the opportunity to experience historic settings and cultural landscapes, participate in traditional cultural activities, participate in water-based activities (canoe programs), and enjoy a semi-wilderness experience on the portage trail (GP Long-Range Interpretive Plan 2005).

The average length of stay for visitors is 1-1.5 hours, and of that time, visitors have minimal interaction with the existing maintenance/garage facility and housing units. The

proposed construction of a new maintenance/garage facility and seasonal housing will not impact visitors experience and thus, visitor use and experience has been dismissed as an impact topic.

Energy Requirements and Conservation Potential

CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508) require examination of energy requirements and conservation potential as a possible impact topic in EAs.

NPS strives to incorporate the principles of sustainable design and development into all park facilities and operations. Sustainability is the result achieved by taking action in a manner that does not compromise the environment or its capacity to provide for present and future generations. Sustainable practices minimize the short- and long-term environmental impacts of developments and other activities through resource conservation, recycling, waste minimization, and the use of energy-efficient and ecologically responsible materials and techniques.

The NPS guidebook *Guiding Principles of Sustainable Design* (1993) provides a basis for achieving sustainability in facility planning and design, emphasizes the importance of biodiversity, and encourages responsible decisions. The guidebook describes principles to be used in the design and management of visitor facilities that emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The Project would reduce energy costs, eliminate waste, and conserve energy resources by using energy-efficient and cost-effective technology wherever possible.

Energy efficiency would also be incorporated into any decision-making process during the design or acquisition of facilities as well as into all decisions affecting operations at the Monument. NPS would encourage suppliers, permittees, and contractors to follow sustainable practices and address sustainable NPS and non-NPS practices in interpretive programs. Consequently, any adverse impacts relating to energy use, availability, or conservation would be negligible, and energy requirements and conservation potential was dismissed as an impact topic.

Geology and Geohazards

The proposed maintenance/garage facility and seasonal housing would require moderate sub-surface modifications primarily for the construction of foundation support, but the activities associated with the Project are primarily surface modifications. The Stevens Road Site has a shallower soil profile than the Store Road Site and would require blasting and rock removal for utility construction and site leveling. However, no unique subsurface geology would be destroyed, and no known geohazards are present below the Stevens Road Site. As a result, the Project would have a negligible effect on geology and geohazards; thus, geology and geohazards was dismissed as an impact topic.

Rare or Unusual Vegetation

The Project would not affect any known rare or unusual vegetation. Therefore, rare or unusual vegetation was dismissed as an impact topic.

Introduction or Promotion of Non-native Species (Plant or Animal)

The construction of the maintenance facility and seasonal housing is not likely to result in the introduction or promotion of non-native species, plant or animal, due to the implementation of standard practices for control on non-native species. Therefore, introduction or promotion of non-native species (plant or animal) was dismissed as an impact topic.

Marine or Estuarine Resources

Although there are no marine or estuarine resources in the area where Project construction would occur, the current storage yard and temporary seasonal housing are by lakefront property off Grand Portage Bay. However, Project activities in the area of the current facilities would only be related to moving of equipment and materials, which would be transported in accordance with applicable requirements. Therefore, the Project would have no effect on marine or estuarine resources, and marine or estuarine resources was dismissed as an impact topic.

Wetlands and Waters of the U.S.

There are no wetlands or waters of the U.S. located within the cleared area proposed for construction on the Store Road Site, and the Stevens Road Site does not have wetlands because of its slope. A drainage ditch off the north edge of the Stevens Road Site drains to Grand Portage Creek, and some wetland vegetation is present to the south of the proposed site. If the cleared area is not sufficient to support construction, additional wetland surveys would be needed. Both potential areas for the Project lack definable bed and bank, and no other Waters of the U.S. exist in the area of potential disturbance for the Project. Because the Project would have no effect on wetlands and other waters of the U.S., this impact topic was dismissed from further evaluation.

Streamflow Characteristics

There is no stream or water way associated with the Stevens Road Site. Thus, the proposed development of the Stevens Road Site would have no impact on streamflow characteristics. The proposed construction of the maintenance/garage facility and linked dormitory buildings at the Store Road Site has the potential to indirectly impact an unnamed drainage ditch located north of the gravel road. The construction process and associated material run-off can alter the streams hydrologic features but Best Management Practices (BMPs) can minimize these impacts. Therefore, with the utilization of BMPs, the proposed construction would have negligible hydrologic impact on the unnamed drainage ditch which discharges to Grand Portage Creek approximately 200 feet east of the site. Additionally, the existing facilities have no impact on stream hydrology. As a result, streamflow characteristics was dismissed as an impact topic.

Floodplain

Regulatory floodplain mapping is currently not available for Cook County but information was made available to Cook County officials during the development of a 1991 EA and floodplains were not identified within the Monument. Although it is unlikely that floodplains would be impacted, the Project would adhere to NPS Director's Order No. 12 and Executive Order 11988. Consequently, floodplains was dismissed as an impact topic (GP GMP-EIS 2003).

Lightscape Management

In accordance with NPS *Management Policies 2006* (NPS, August 2006), NPS strives to preserve natural ambient lightscapes, which are natural resources and values that exist in the absence of human-produced light.

NPS would limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements. In addition, NPS would ensure that all outdoor lighting is shielded to the maximum extent possible to keep light on the intended subject and out of the night sky so that the contribution to surrounding light sources would be minimal. Therefore, lightscape management was dismissed as an impact topic.

Natural or Depletable Resource Requirements and Conservation Potential

A temporary unavoidable increase in the use of fossil fuels would occur from the use of machinery during construction. The Project would not cause a long-term increase in the use of natural or depletable resources but would result in a long-term reduction in the use of fossil fuels resulting from the consolidation of maintenance facilities and equipment and materials storage.

The Project would result in the removal of approximately 4 acres of forest area should the Stevens Road Site be selected. This impact is addressed in Sections 3.6, Wildlife and Habitats, and 3.8, Vegetation. It is not anticipated that any additional clearing would be needed for the Project at the Store Road Site. With the exception of this 4.0-acre reduction in forest area within the Monument with the Stevens Road site, the Project would not have an effect on resource conservation potential. Therefore, natural or depletable resource requirements and conservation potential was dismissed as an impact topic.

Long-term Management of Resources or Land/Resource Productivity

The Project would not have an adverse impact on the long-term management of resources within the Monument or land/resource productivity other than the 4.0-acre reduction in forest discussed above should the Stevens Road site be selected. It is not anticipated that any additional clearing would be needed for the Project at the Store Road Site. The Project would result in more efficient use of resources at the site and would have a negligible effect on the long-term management of resources or land/resource productivity. Therefore, long-term management of resources or land/resource productivity was dismissed as an impact topic.

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CHAPTER 2

ALTERNATIVES

CHAPTER 2
ALTERNATIVES

This chapter describes the range of alternatives developed to address the needs identified in Chapter 1, Purpose and Need. It also describes the screening process used to determine which alternatives to dismiss and which to carry forward for further review. The alternatives are analyzed and compared with respect to the purpose of the proposed action identified in Chapter 1. Then the resource protection measures to be incorporated into the Project are described. Finally, the environmentally preferable alternative is identified, and the impacts of the alternatives carried forward in this EA are summarized.

2.1 RANGE OF ALTERNATIVES

During the internal scoping phase of the Project, Band and Monument staff looked for sites near the Monument that were approximately 2 acres in size and identified six potential sites for the Project. Only two of the six sites, the Store Road and Stevens Road sites, were determined to be feasible alternatives. Table 2-1 lists all sites initially considered and indicates which were carried forward, which were dismissed, and what rationale was used to screen out unreasonable alternatives. Sections 2.3.2 and 2.3.3 provide the reasons for carrying forward the Store Road and Stevens Road sites for further evaluation, respectively.

Table 2-1
Range of Build Alternatives

Alternative	Disposition of Alternative
Store Road Site, on Band property	Carried forward for further consideration (See Section 2.3.2 for the rationale.)
Stevens Road Site, on NPS property	Carried forward for further consideration (See Section 2.3.3 for the rationale.)
Site North of Minn. 61, on Band property	Dismissed for safety reasons (The location would require frequent crossing of Minn. 61 by NPS vehicles.)
Site North of Mount Rose Trail, on NPS property	Dismissed because site is too small (Band and Monument staff have agreed to a site of about 2 acres for the maintenance facility, including the outdoor storage yard, and the seasonal housing)
Site by Outdoor Storage Yard, on NPS property	Dismissed because of archaeological sensitivity and wetlands that could not be avoided (Disturbance of these resources would cause environmental impacts and require complicated coordination with resource agencies.)
Site south of the Old Log School, on Band property	Dismissed because of wetlands and cultural resources that could not be avoided (Disturbance of these resources would cause environmental impacts and require complicated coordination with resource agencies.)

2.2 BUILD ALTERNATIVES CARRIED FORWARD FOR FURTHER REVIEW

Two build alternatives (potential sites for construction of the Project) were carried forward for further consideration and for more detailed environmental analysis: the Store Road Site, and Stevens Road Site, described in Sections 2.2.1 and 2.2.2, respectively. The locations of both potential sites are shown in Figure 1-2, General Project Area. Both alternatives would consolidate a new maintenance facility, outdoor storage yard, and seasonal housing for NPS staff on one site of approximately 2 acres in size.

2.2.1 Store Road Site Alternative

The Store Road (County Road 73) Site is located approximately 1,700 feet northwest of the current maintenance facility on Band land. The entrance road branches to the west off Store Road and extends northwest to the Grand Portage Trust Lands and Resources facilities. A two-track road (tire tracks through vegetation) extends westward from the entrance road and provides access to a cemetery in the woods; this cemetery access route would remain. An area estimated to be almost 3 acres has been disturbed; the site has been cleared and graded by the Band, though the grading is currently not to building standards. A pole barn has been constructed on the site, which also contains a cluster of several trailers, construction materials, and an old truck topper. Because the Band currently uses the site for construction material storage, the site experiences backhoe and other vehicle traffic throughout the day. There is no visible evidence of staining that would indicate hazardous material spills. The Grand Portage Trust Lands[1] and Resources facilities for natural resources, forestry, and maintenance are just north of the site.

2.2.2 Stevens Road Site Alternative

The Stevens Road Site is located on Monument land south of Stevens Road, west of Country Road 17, and approximately 500 feet from Grand Portage Bay; it would be approximately 2,400 feet closer to the bay than the Store Road Site. The area is dominated by shallow bedrock; areas with soils of depth often contain large rocks. The site is wooded and has no utility service. A well previously drilled by NPS has been abandoned because it did not provide sufficient water to meet standards for fire suppression. An occupied home is west of the site.

This site would require an access and utility corridor, approximately 300 feet long, through a currently undisturbed area on tribal lands in order to connect the NPS facilities with utilities along Stevens Road. This access road and utility corridor would require the use of approximately 2 acres of tribal lands. Consequently, approximately 4 acres of land (2 acres for the site and 2 acres for the access road and utility corridor) would need to be disturbed for this alternative.

[1] Trust lands are governed by the land management agency for the reservation.

2.3 ALTERNATIVES CARRIED FORWARD IN THIS EA

Based on the evaluation of the build alternatives, the Store Road Site Alternative and Stevens Road Site Alternative are carried forward for further consideration in this EA. In addition, the No-Action Alternative (representing the status quo) was carried forward to serve as a baseline for comparison with the build alternative as required by NEPA (42 USC 4321-4347). The No-Action Alternative and the two build alternatives are discussed below.

2.3.1 Alternative A – No-Action Alternative

The No-Action Alternative would continue operations without any changes. As discussed in Chapter 1, Purpose and Need, current operations are hindered by inadequacies in the condition and locations of the existing maintenance facility, outdoor storage yard, and temporary housing for seasonal NPS employees:

- Maintenance operations are adversely affected by the inadequate capacity and crowded conditions at the existing maintenance facility. The building is not in compliance with building code and lacks a paved area for vehicle maintenance.
- The maintenance facility is not integrated with the outdoor storage yard for equipment and supplies, which is located approximately 1,400 feet to the east on prime lake-front property along County Road 17.
- The housing for seasonal NPS employees is deteriorating and is located on prime lake-front property, owned by the Band, adjacent to the island boat tour docks at Voyageurs Marina. If no action were taken in the future, routine maintenance and repairs would continue and would possibly increase given the projected use of the housing, but there would be no improvements to the functionality of the site.
- The seasonal housing is not located near other NPS facilities, and requires seasonal employees to commute to their job sites.

Under the No-Action Alternative, the existing run-down buildings would continue to be used, and valuable lake-front property that could be put to better use by the Band and the Monument would continue to serve operational purposes rather than promote the Monument's educational and recreational goals.

2.3.2 Alternative B – Store Road Site Alternative

The Store Road Site Alternative, described in Section 2.2.1, above, was carried forward for further consideration in this EA because it is logistically feasible, meets the purpose of and need for the proposed action, and would have minimal environmental impacts.

Approximately 3 acres of land in the area proposed for the Store Road Site have been cleared, and approximately 2 acres of land are needed for the maintenance facility, storage yard, and seasonal housing. Consequently, it is not anticipated that clearing of previously undisturbed area would be required. A drainage ditch off the north edge of the site drains to Grand Portage Creek, and some wetland vegetation is present to the south of the proposed site. If the cleared area is not sufficient, additional archeological and wetland surveys may be needed. A tribal allotment southeast of the site would not be

reduced by development of this site. A historic cemetery and a farmstead are located near but outside the proposed site. A former groundwater well that was capped and properly closed is adjacent to the pole barn.

The site would include a maintenance facility with a shop and an office, an equipment/material storage yard for equipment and supplies, and two dormitory buildings for NPS employees, along with parking lots for staff, residents, and RVs. The access road to the seasonal housing would be limited to use by residents and visitors only (see Figure 2-1, Alternative B – Store Road Site (Proposed Configuration). Gravel driveways and parking lots would be installed initially, with the potential for future asphalting of the driveways and parking lots.

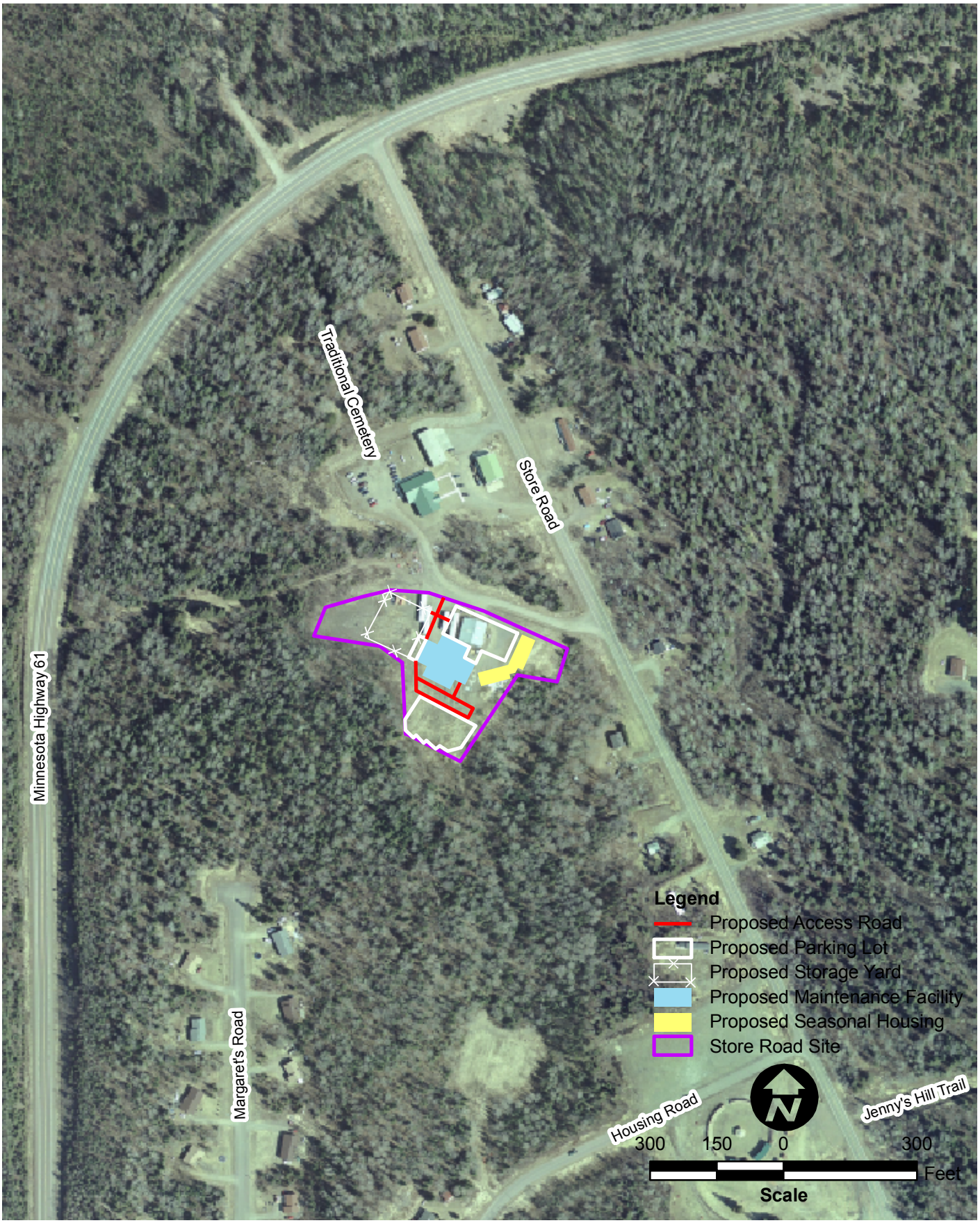
The new maintenance facility constructed at this site would be approximately 6,300 square feet in area. The facility would include a storage area for RTC-audited material, vehicle storage, a maintenance garage with a vehicle lift, a wood shop with dust collection, multiple storage areas, a conference/lunch room, restrooms, and concrete aprons. The facility would have shared function by the Band and NPS.

The proposed seasonal housing, approximately 4,000 total square feet in area, would consist of two linked dormitory-style buildings, each containing four bedroom units, two bathrooms, and a kitchen and living area. The NPS standard design for dormitory buildings would be used and modified as needed to meet a variety of criteria. The housing would be designed and built according to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) gold or platinum standards, with attention given to its orientation on the site, energy efficiency, sustainability, and other green building qualities. This would be the first such building constructed by the NPS in the region.

2.3.3 Alternative C – Stevens Road Site Alternative

The Stevens Road Site Alternative, described in Section 2.2.2, above, was carried forward for further consideration in this EA because it is on NPS land, is logistically feasible, meets the Project objectives, and would likely have fewer environmental impacts than the four alternatives considered but eliminated from further evaluation. However, the site would require construction of an access road on tribal lands and has limitations with respect to utility costs, water and wastewater access, geologic formations, road construction, and the need for clearing vegetation to connect to the necessary services. Blasting and rock removal would likely be required for utility construction and site leveling at the Stevens Road Site. Although there is a cleared area with an abandoned power line corridor south of the Cemetery Access Road, access road construction would not be feasible because of the topography of this area. Access to the site from the east or southeast would also not be feasible because of natural stone outcroppings and slopes. The access road construction could have an impact footprint comparable in size to the site itself.

The facilities constructed on the Stevens Road Site would be the same as those at the Store Road Site (as described in Section 2.3.2) but in a somewhat different configuration (see Figure 2-2, Alternative C – Stevens Road Site (Proposed Configuration).



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HDR

Alternative B - Store Road Site (Proposed Configuration)

Grand Portage Maintenance Facility and Seasonal Housing EA

DATE

September 2009

FIGURE

2-1

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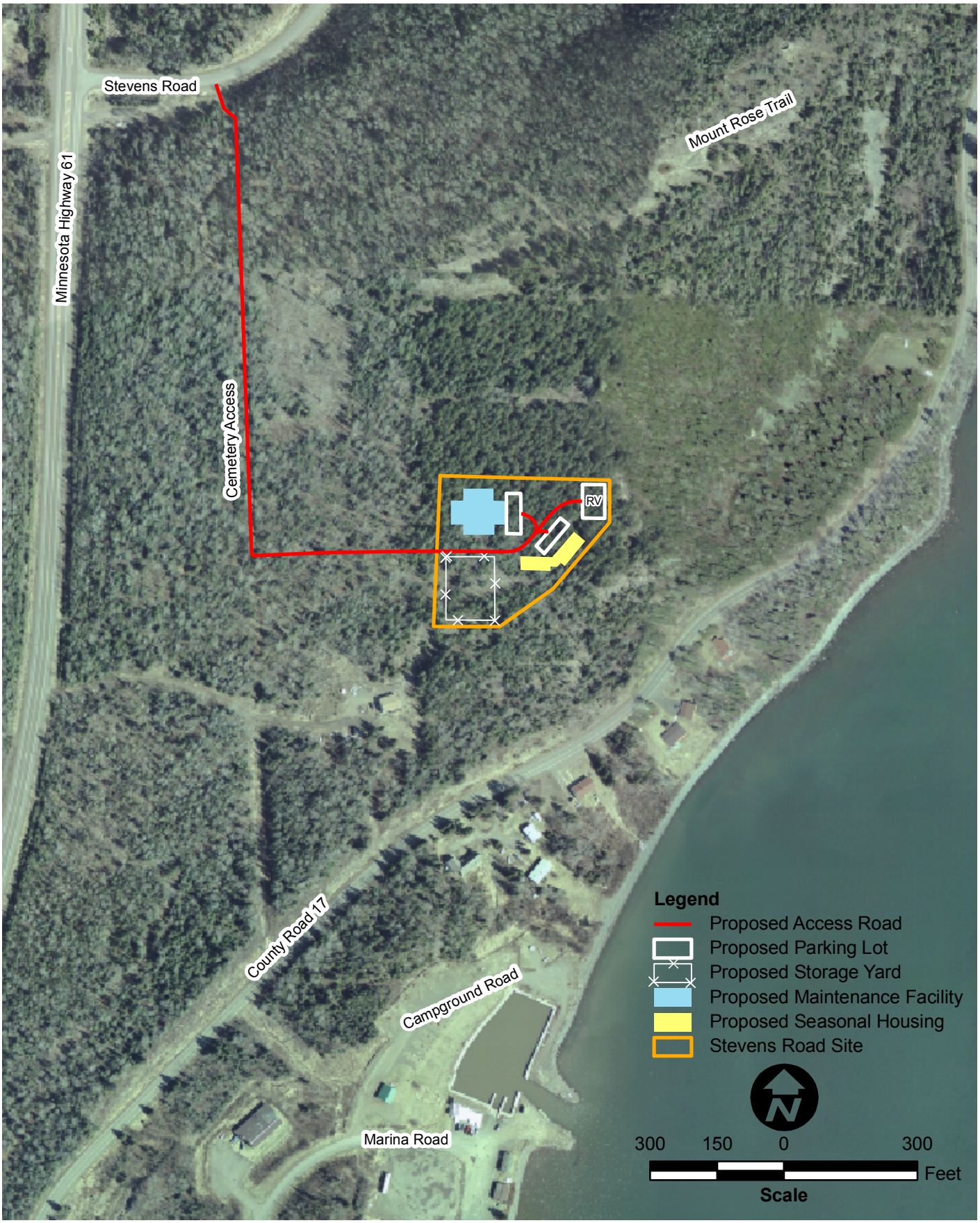

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HDR

Alternative C - Stevens Road Site (Proposed Configuration)

Grand Portage Maintenance Facility and Seasonal Housing EA

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FIGURE
2-2

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2.4 COMPARISON OF ALTERNATIVES

The three alternatives carried forward in this EA, the No-Action Alternative and the two build alternatives, were reviewed to determine whether they meet the purpose of the proposed action, as summarized in Table 2-2.

Table 2-2
Ability of the Alternatives to Meet the Purpose of the Proposed Action

Purpose of the Proposed Action	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
To address inadequacies of the current maintenance facility	The current multiple inadequacies of the maintenance facility would continue, with further deterioration and obsolescence over time.	An adequate, new maintenance facility would be constructed on this site.	An adequate, new maintenance facility would be constructed on this site.
To consolidate the maintenance facility and the outdoor storage yard on a single site	The maintenance facility and outdoor storage yard would continue to be on separate sites, resulting in a loss of operational efficiency.	The maintenance facility and outdoor storage yard would be consolidated on one site, thus improving operational efficiency.	The maintenance facility and outdoor storage yard would be consolidated on one site, thus improving operational efficiency.
To improve the quality of the seasonal housing for the NPS staff	Seasonal housing would continue to be in poor condition and would become more outdated and rundown over time.	Adequate, new seasonal housing would be constructed on this site.	Adequate, new seasonal housing would be constructed on this site.
To centralize the seasonal housing closer to the Monument.	Seasonal housing would still be located on prime lake-front property leased from the Band.	Seasonal housing would be established near the Monument and facilitate a shorter commute, and free up lake front property for Band use.	Seasonal housing would be established near the Monument and facilitate a shorter commute, and free up lake front property for Band use.

The No-Action Alternative would result in the current situation continuing. The three facilities would continue to be located on or near County Road 17, which skirts Grand Portage Bay. The maintenance facility would still occupy a historic location approximately at the head of the Grand Portage Trail. The outdoor storage yard would still occupy a site on prime lake-front property, where there is potential for archeologically sensitive resources.

Although the two alternative sites both would meet the purpose of the proposed action, the Store Road Site has several advantages compared to the Stevens Road Site. The following is a summary of some of the advantages; Section 2.7 provides a resource-by-resource comparison of impacts for the three alternatives carried forward for detailed analysis:

- Less disturbance of trees, wildlife habitat, and geology would be required.
- There would be less probability of impacting archaeological resources.
- Maintenance and storage activities already occur at the site.
- The site is closer to the Monument, which reduces travel time.
- Fire protection is less complicated because of the open area and close proximity to other facilities and utilities.

2.5 RESOURCE PROTECTION MEASURES

Under the Project, measures would be taken to protect resources in the Project Area. With the implementation of best management practices and mitigation measures, impacts from the Project would be avoided or minimized. The best management practices and mitigation measures presented in Table 2-3, Resource Protection Measures, would be incorporated into Project construction documents.

Table 2-3
Resource Protection Measures

Resource Category/Action	Responsible Party
Public Health and Safety	
An accident prevention plan, including a job hazard analysis for each Project component, would be required for construction. The plan would address the following: • Fires • Slides • Floods • The nature of construction work • Site conditions • Required Project inspections • Safety meetings	Construction contractor
The use of hazardous materials would be approved in advance, including: • Analysis of explosive, flammable, poisonous, corrosive, oxidizing, or irritating substances (relative to their safe storage and use) • Minimization of the use of hazardous chemicals • Use of substances with low or no air quality impacts, and limited persistence or low potential to cause chemical sensitivity	NPS and construction contractor
Cultural Resources	
A meeting would be held with the Monument archaeologist to discuss the area's historic resources, clarify construction schedules, and establish a plan for archaeological monitoring, if necessary, of ground-disturbing site work, including: • Clearing • Topsoil removal • Excavation • Landscaping	NPS and construction contractor

Resource Category/Action	Responsible Party
If prehistoric or historic archaeological resources are discovered during any portion of the Project, work in the area associated with the find would cease until evaluated by the Monument archaeologist or designated representative, and procedures outlined in 36 CFR 800, Protection of Historic Properties, would be followed, potentially including relocation of the work to a non-sensitive area to avoid further disturbance to the site until significance of the find can be evaluated.	NPS and construction contractor
Discovered resources would be evaluated for their potential eligibility for listing on the National Register of Historic Places (NRHP), and if needed, mitigation measures would be developed in consultation with the Minnesota State Historic Preservation Office (SHPO). Mitigation measures would be commensurate with resource significance and preservation needs; measures could include such provisions as changes in Project design and/or archaeological monitoring of the Project and data recovery conducted by an archaeologist meeting the Secretary of the Interior's standards.	NPS
To reduce unauthorized collecting from areas, the following measures would be taken: • Construction personnel would be educated about the need to protect any cultural resources encountered. • Work crews would be informed that it is illegal to collect artifacts on Federal lands (16 USC 470aa et seq., Archaeological Resources Protection Act of 1979). • In advance of ground-disturbing activities, instructions would be given regarding respectful treatment of human remains and notification of the appropriate personnel in the event such remains are discovered.	NPS and construction contractor
To minimize ground disturbance, all staging areas, materials stockpiling, vehicle storage, and other construction-related facilities and areas would be located in a previously disturbed area or on hardened surfaces to the extent practicable.	NPS and construction contractor
Revegetation efforts would include the following: • Types and locations of replacement vegetation that replicate historic elements of the cultural landscape • Stockpiling and reuse of existing vegetation and landscaping materials to the extent practicable	NPS and construction contractor
Wildlife and Fisheries	
NPS would schedule tree and ground vegetation clearing activities outside of the primary nesting season to avoid or minimize adverse impacts on nesting migratory birds. If clearing activities must occur during the nesting season, the trees to be removed and areas of disturbed ground cover would be surveyed for migratory birds prior to clearing. Should active nests be observed and should it be determined that such nests cannot be avoided until after the birds have fledged (left the nest), and if no practicable or reasonable avoidance alternatives are identified, then the contractor would complete Federal Fish and Wildlife License/Permit Application Form 37 and submit it to the U.S. Fish and Wildlife Service (USFWS) Migratory Bird Program Office in Denver, Colorado. Any trees and ground vegetation providing habitat would be removed during a designated period that would minimize the impact on species.	NPS and construction contractor
Construction workers would be educated about the following: • The dangers of intentional or unintentional feeding of park wildlife • Inadvertent harassment through observation or intentional pursuit • The need for workers to remain within the construction perimeter	NPS
Best management practices would be implemented to minimize surface water runoff and sedimentation.	Construction contractor

Resource Category/Action	Responsible Party
Soils and Vegetation	
To minimize vegetation disturbance, the following measures would be taken: • Mature trees identified for removal would be flagged prior to the start of construction in consultation with the Monument biological science technician. • Construction limits would be fenced prior to beginning any work under the proposed contract and up to 20 feet around the construction site until completion of the contract to ensure no disturbance occurs outside of the construction limits.	NPS and construction contractor
As appropriate, all native species in jeopardy of extirpation from the site, and not readily available from a commercial nursery, will be transported outside the limits of construction by the Monument.	NPS
To protect the viability of the vegetation in the Project Area, the following measures would be taken: • Plants to remain in place would be protected from cutting, breaking, and skinning of roots, branches, or bark. • Imported soils and other fill materials would be certified sterile and weed free and are subject to inspection. • Erosion control would be in the form of sterile matting to preclude the introduction of non-native species.	NPS and construction contractor
Disturbed areas would be revegetated with native species, and the topsoil would be moved back into place following construction.	NPS and construction contractor
Air Quality	
Minnesota statutory regulations for air pollution control would be complied with.	Construction contractor
To the degree possible, air quality impacts would be mitigated by the following: • Reducing vehicle emissions by keeping equipment properly tuned and maintained in accordance with manufacturers' specifications and by not allowing engines to idle • Using best management practices to reduce generation of dust • Limiting the types of chemicals (low volatile organic compound ratings) used in new construction and rehabilitation work • Reducing trip generation by encouraging carpooling and shipment of full loads only	Construction contractor
Water Resources	
To prevent soil from eroding and depositing into water sources, the following measures would be taken: • Stored fill material would be surrounded by silt fencing and overtopped by semi-permeable matting anchored together to prevent siltation from heavy runoff during rainstorms or snow melt. • Adequate erosion control or drainage structures would be installed and maintained. • Stockpiling of materials would occur on pavement or in areas exhibiting signs of recent disturbance.	Construction contractor
An adequate hydrocarbon spill containment system would be available on site in case of unexpected spills in the Project Area.	Construction contractor

2.6 ENVIRONMENTALLY PREFERABLE ALTERNATIVE

In accordance with NPS *Management Policies 2006* (NPS, August 2006), the environmentally preferable alternative should meet the following six criteria, set forth in NEPA, Section 101(b) (42 USC 4321-4347):

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Ensure 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 of 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 that supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use that 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.

Because these criteria are broad, determining whether an alternative meets or does not meet a criterion is not always straightforward. However, the environmentally preferable alternative can be determined by applying the criteria suggested by CEQ, which provides direction in its guidance "Forty Most Asked Question's Concerning CEQ's National Environmental Policy Act Regulations" (46 FR 18026). The CEQ defined the environmentally preferable alternative as "…the alternative that causes the least damage to the biological and physical environment. It also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources."

Therefore, the three alternatives carried forward in this EA—the No-Action Alternative, the Store Road Site Alternative, and the Stevens Road Site Alternative—were evaluated based on the CEQ criteria, as well as their capability to meet the Project purpose and need, as discussed below.

The No-Action Alternative would not consolidate seasonal housing and maintenance facilities and equipment because the existing facilities would continue to be used. The No-Action Alternative would not improve the efficiency of maintenance operations. The No-Action Alternative would preserve historic, cultural, and natural resources in the Project Area because it would not require the development of natural areas.

The Stevens Road Site Alternative would meet the purpose and needs of the Project but has the potential to adversely effect cultural and natural resources through the development of a previously undisturbed site. These effects would be of a greater magnitude than the effects of the Store Road Site Alternative.

The Store Road Site Alternative was selected as the Environmentally Preferable Alternative because it consolidates seasonal housing, and maintenance facilities and equipment, while minimizing the impacts on the environment. The Store Road Site

Alternative is also considered to be the Agency Preferred Alternative. Throughout the remainder of this EA, the No-Action Alternative is referred to as Alternative A – No-Action, the Store Road Site Alternative is referred to as Alternative B – Store Road Site, and the Stevens Road Site Alternative is referred to as Alternative C – Stevens Road Site.

2.7 SUMMARY OF IMPACTS

Potential impacts of Alternative A – No-Action, Alternative B – Store Road Site, and Alternative C – Stevens Road Site are summarized in Table 2-4. For each impact topic, the underlined text represents the overall impact of the bulleted items that follow. These impacts are discussed in detail, along with a description of the affected environment, in Chapter 3, Affected Environment and Environmental Consequences.

Table 2-4
Summary of Impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Public Health and Safety	Minor to Potentially Moderate Impact • Continued inefficiencies of operating the maintenance and storage yard at separate locations, with trips between the sites • Slight risk of accidents when traveling between sites • Continued safety precautions associated with the outdoor storage yard • No contribution to cumulative impacts in the area	Minor Short-term Adverse Impact • Concerns in conjunction with transporting equipment and regulated materials along the direct route from the existing outdoor storage yard to the proposed Store Road maintenance facility • Concerns in conjunction with constructing the maintenance facility and the seasonal housing • Minor adverse cumulative impact due to potential redevelopment of the existing properties • Long-term beneficial impact – reduced risk of accidents and hazardous material spills by separating conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site and by the increased distance between the maintenance facility, the trail, other surrounding land uses	Minor Short-term Adverse Impact • Concerns in conjunction with construction activities at the site • Concerns in conjunction with transporting equipment along Stevens Road and the access road • Concerns in conjunction with providing emergency services to the site • Minor adverse impact from potential redevelopment of the existing maintenance and housing properties • Minor adverse cumulative impact due to potential redevelopment of the existing properties • Long-term beneficial cumulative impact – separation of incompatible land uses and potential redevelopment of the site with a more compatible use
Socioeconomics	Negligible Regional Impact • No potential redevelopment of the existing maintenance and housing facilities • Economic conditions unchanged • Job opportunities and job loss unchanged	Minor Beneficial Impact • Minor, short-term and beneficial construction-related impacts • Minor and beneficial overall cumulative impacts – potential redevelopment of lake-front properties	Minor Beneficial Impact • Minor, short-term and beneficial construction-related impacts • Minor and beneficial overall cumulative impacts – potential redevelopment of lake-front properties

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Environmental Justice	<u>No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations</u> • Negligible to minor cumulative adverse impacts • Potential effect on the income of the minority and low-income populations in the area from potentially not providing employment opportunities that could result from redevelopment of an area of the Monument important to tourism	<u>No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations</u> • Impacts from loss of developable land offset by short- and long-term minor beneficial impacts • Beneficial cumulative short- and long-term impacts • Beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region from enhanced visitor experience and tourism • Employment opportunities in conjunction with construction of the proposed facilities and potential redevelopment of the existing sites	<u>No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations</u> • Impacts from loss of developable land offset by short- and long-term minor beneficial impacts • Beneficial cumulative short- and long-term impacts • Beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region from enhanced visitor experience and tourism by potential redevelopment of the existing sites of the maintenance facility and the seasonal housing • Employment opportunities in conjunction with construction of the proposed facilities and potential redevelopment of the existing sites

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Other Agency or Tribal Land Use Plans or Policies	No Effect • No action subject to the Band's land use ordinance • No contribution to cumulative impacts	Negligible Impact • Construction of an industrial structure in a residential land use district (currently used for non-residential purposes) • Negligible impact with approval of Grand Portage Trust Lands and Resources and the RTC to continue using the site for industrial purposes while adding a residential use to a portion of the site • Negligible contribution to cumulative impacts	Negligible Impact • Construction of an industrial structure in a park and recreation land use district • Negligible impact with approval of Grand Portage Trust Lands and Resources and the RTC to construct an access road, maintenance facility, and seasonal housing • Minor contribution to cumulative impacts
Cultural Resources (Note: The wording used to summarize impacts on cultural resources is required by Section 106 of the National Historic Preservation Act of 1966 [16 USC 470f].)	No Effect/No Impact • No new disturbance in the Project Area • No impairment of Monument resources • No contributions to the potential for adverse effects on the region's cultural resources; thus, no cumulative impact	No Effect/No Impact on Historic Properties • No known historic resources present; little potential for intact archaeological resources because the site was previously cleared and grubbed • No contribution to cumulative impacts	No Effect/No Impact on Historic Properties • Based on current knowledge, no known historic resources present at the site • If Alternative C is selected, an archaeological resources and standing structures survey should be completed along the proposed access prior to construction. • No contribution to cumulative impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Sacred Sites	No Effect or Cumulative Impact • No new disturbance or change in typical operations	No Effect or Cumulative Impact • No known sacred sites in the vicinity of the Project location for Alternative B	Minor Long-term Adverse Impact • Introduction of human activity in a mostly undisturbed area near the Ojibwe sacred site on Mt. Rose • Potential to lead to additional development in the area, with increased likelihood of future impacts on the sacred site • Further consultation with the Band is needed to determine the nature of any impact on this sacred site
Indian Trust Resources	Minor Long-term Adverse Impact • Continued use of the current NPS seasonal housing site (located on Indian Trust Land), precluding potential redevelopment of this land by the Band to generate revenue	Minor Long-term Impact (potentially beneficial) • Loss of land available for the Band's use (approximately 2 acres of Indian Trust Land leased to the NPS) • Shared use of the new maintenance facility by the NPS and the Band • Improved functionality of the Store Road site • Valuable lake-front Indian Trust Land (currently used for NPS seasonal housing) available for Band use	Minor Long-term Adverse Impact • Conversion of 2 acres of Indian Trust Lands from forest to a road for access to the new maintenance facility and seasonal housing on NPS lands
Wildlife and Habitats	No Impact • No new land disturbance or change in typical operations • No impairment of resources • No cumulative impacts	Negligible Adverse Impacts • No impairment of Monument resources • Disturbance of habitat in Project Area as a result of construction activities • Negligible cumulative impacts	Minor Adverse Impacts • No impairment of Monument resources and values • Disturbance of habitat in Project Area as a result of construction activities • Minor cumulative impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Endangered, Threatened, or Protected Species and Critical Habitats (Note: The wording used to summarize impacts on endangered, threatened, or protected species and critical habitats is required by Section 7 of the Endangered Species Act of 1973 [16 USC 1531 et seq.].)	No Effect/No Impact • No impairment of Monument resources • No cumulative impact	No Effect/No Impact • No effect anticipated on any endangered, threatened, or protected species and critical habitats • No impairment of Monument resources • No cumulative impact • If Alternative B is selected, a plant species survey should be conducted to verify that these species have not moved into the area during the intervening time.	May Affect But Not Likely To Adversely Affect/Minor Negligible Impact • May affect but not likely to adversely affect the gray wolf and its critical habitat • No effects on other endangered, threatened, or protected species and critical habitats • No impairment of Park resources. • Minor cumulative impact with construction on this site through clearing of native vegetation and introduction of human disturbance • If Alternative C is selected, a plant species survey should be conducted to confirm that none of these species are present and that the trees do not meet the summer habitat requirements of the northern myotis.
Vegetation	No Impact • No new land disturbance • No cumulative impacts	Minor Beneficial Long-term Impacts • No impairment of Monument resources • No additional land clearing needed in the Project Area • Reseeding or replanting with native species in the area that is developed • Minor and beneficial cumulative impact	Minor to Moderate Long-term Adverse Impact • Presence of natural vegetation and rare jack pine stand in the vicinity of this site • Minor to moderate and adverse cumulative impact

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Air Quality	Negligible Adverse • Continued negligible adverse impact on air quality from existing operations • No contribution to cumulative impacts	Minor Adverse • Short-term, minor, adverse, and local impacts during construction • Short-term, minor, adverse cumulative impacts from potential redevelopment construction • Negligible long-term impacts	Minor Adverse • Short-term, minor, adverse, and local impacts during construction • Short-term, minor, adverse cumulative impacts from potential redevelopment construction • Negligible long-term impacts
Soundscape Management	Minor Impact • Continued noise from maintenance facility near Grand Portage Trail • No impairment of Monument resources • No cumulative impacts	No Long-term Impact • No impairment of Monument resources • No cumulative impacts	Minor to Moderate Long-term Adverse Impact • No impairment of Monument resources • Minor to moderate long-term and adverse cumulative impact
Water Quality	Negligible Adverse • Negligible impacts from current facilities • Negligible to minor cumulative impacts from potential redevelopment.	Minor Adverse • Short-term, minor, adverse impacts from land disturbance during construction • Negligible beneficial long-term impact from relocation of facilities farther from Grand Portage Creek and Bay • Short-term, minor, adverse cumulative impacts from potential redevelopment • Negligible long-term cumulative impacts	Minor Adverse • Short-term, minor, adverse impacts from land disturbance during construction • Negligible beneficial long-term impact from relocation of facilities farther from Grand Portage Creek and Bay • Short-term, minor, adverse cumulative impacts from potential redevelopment • Negligible long-term cumulative impacts

CHAPTER 3

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

CHAPTER 3
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and environmental consequences associated with the alternatives for the Project. The intent is to provide an analytical basis for comparison of the alternatives and the impacts that would result from implementation of these alternatives. First, the methodology for conducting the analysis is described. Then, the results of the analysis are presented by impact topic, as identified in Section 1.5.1, Impact Topics Retained. Consistent with NEPA, the analysis also considers the duration, intensity, type, and context of impacts; indirect impacts; cumulative impacts; and measures to mitigate impacts. NPS policy also requires that impairment of Park resources, as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values, be evaluated in all environmental documents associated with resource analysis.

3.1 METHODOLOGY

3.1.1 Conducting the General Evaluation

For each impact topic, the analysis includes a brief discussion of the regulations and policies applicable to the resource, a description of the affected environment, and an evaluation of the impacts of implementing each alternative. The impact analyses were based on information provided by the Band, NPS staff, relevant references and technical literature, and subject matter experts. The impact analyses involved the following steps:

- Define issues of concern based on Project planning and scoping.
- Identify the geographic area that could be affected.
- Define the resources within the area that could be affected.
- Impose the action on the resources within the Project Area.
- Identify the impacts caused by the alternative, in comparison to the baseline represented by the No-Action Alternative, to determine the relative change in resource conditions.
- Characterize the impacts based on the following factors:
    - Duration of the impact: short-term or long-term. The duration is characterized differently for each impact topic, and the definitions of these terms are provided in Table 3-1, Impact Topic Threshold Definitions.
    - Intensity of the impact: negligible, minor, moderate, or major. These threshold definitions used to describe the intensity of impacts are provided in Table 3-1, Impact Topic Threshold Definitions. Threshold values were

developed based on federal and state standards, consultation with resource agencies, and discussions with subject matter experts.

  - Type of impact: beneficial or adverse.
  - Context or area affected by the impact: local (within the Project Area and immediate vicinity), Monument-wide (throughout the Monument), or regional (extending beyond Monument and trust land boundaries).

- Determine whether the impact would be a direct result of the Project or would occur indirectly because of a change to another resource or impact topic. An example of an indirect impact would be increased mortality of an aquatic species that would occur because an alternative would increase soil erosion, which would reduce water quality.
- Determine cumulative impacts by evaluating the impacts of the Project in conjunction with the impacts of past, present, and reasonably foreseeable future projects in the Monument and the region.
- Determine whether impairment would occur to resources and values that are considered necessary and appropriate to fulfill the purposes of the Monument (see Section 3.1.5, Prohibition of Impairment of Park Resources and Values).
- Determine what resource protection measures (see Section 2.5) should be implemented to minimize impacts.

3.1.2 Assessing Cumulative Impacts

CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508) 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). Reasonably foreseeable future actions are those that are not speculative, are likely to occur based on reliable sources, and are typically characterized in planning documents. Therefore, cumulative impacts are considered for both the No-Action Alternative and the Preferred Alternative.

As noted in Section 1.4.1, there are no other current or near-term future projects funded for the Monument. Eventually, the sites currently hosting the maintenance building, storage yard, and temporary housing may be redeveloped, causing impacts to the environment. Past activities include the development of the Grand Portage area. The Project would not adversely affect current plans of the Monument, and would be developed in consideration of past activities.. Consequently, the overall cumulative impacts of the Project in consideration of past activities, and other future activities within the Monument are expected to be minor.

Table 3-1
Impact Topic Threshold Definitions

Impact Topic	Duration	Negligible	Minor	Moderate	Major
Public Health and Safety	Short-term – Effects occur only during the duration of the Project. Long-term – Effects persist beyond the duration of the Project.	Public health and safety would not be affected, or the effect would be at a low level of detection and would not have an appreciable effect on public health and safety.	The effect would be detectable but would not have an appreciable effect on public health and safety. If mitigation were needed, it would be relatively simple and likely successful.	The effect would be readily apparent and would result in substantial effects on public health and safety on a local scale. Changes in likelihood, rates, or severity of injury could be measured. Mitigation measures would probably be necessary and would likely be successful.	The effect would be readily apparent and would result in substantial, noticeable effects on public health and safety on a regional scale. Changes could lead to changes in mortality. Extensive mitigation measures would be needed, and their success would not be assured.
Socioeconomics	Short-term – Effects occur only during Project implementation activities. Long-term – Effects extend beyond Project implementation activities.	Economic and socioeconomic conditions would not be affected, or effects would not be measurable.	The effect on economic and socioeconomic conditions would be small but measurable and would affect a small portion of the population. Few effects could be discerned outside of Grand Portage, and the surrounding unincorporated areas.	The effect on economic and socioeconomic conditions would be readily apparent and widespread in the vicinity of Grand Portage, and the surrounding unincorporated areas; the effects would be evident throughout Cook County.	The effect on economic and socioeconomic conditions would be readily apparent and would substantially change the economy within Cook County.
Environmental Justice	Short-term – Impacts would only last during construction or immediately following Long-term – Impacts would be semi-permanent to permanent.	Impacts would be barely perceptible and would not disproportionately affect the community in any way.	Beneficial or adverse impacts would be perceived, but would not limit or enhance the intent of the enabling legislation mandates regarding the Grand Portage Community.	Beneficial or adverse impacts would have a higher affect on the community of Grand Portage and would noticeably limit or enhance the intent of the enabling legislation mandates.	Actions would have a disproportionately high adverse impact on the community of Grand Portage relative to those impacts in other, non-minority or middle-income communities. Beneficial impacts on the community of Grand Portage would go far

Impact Topic	Duration	Negligible	Minor	Moderate	Major
					beyond fulfillment of enabling legislation mandates.
Other Agency or Tribal Land Use Plans or Policies	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	Little or no change in land use that is compatible with other agency or tribal land use plans or policies.	Local changes in land use that are compatible with other agency or tribal land use plans or policies	Large changes in land use compatible with other agency or tribal land use plans or policies or changes in land use that require a modification of other agency or tribal land use plans or policies	Any change in land use that is incompatible with other agency or tribal land use plans or policies
Cultural Resources (Note: The italic type represents the wording required by Section 106 of the National Historic Preservation Act of 1966 [16 USC 470f] for discussing impacts on cultural resources.)	Short-term – Short-term impacts would involve such things as treatment impacts on the natural elements of a cultural landscape that would extend for no more than 5 years. Examples would include the restoration of historic plantings or the regrowth of vegetation. Long-term – Impacts on virtually all cultural features other than vegetation components would be long-term impacts because most cultural resources are nonrenewable. These would include impacts on archaeological, historic, or ethnographic resources and on non-vegetation elements of a cultural landscape.	Impact is at the lowest levels of detection: barely measurable, with no perceptible consequences, either adverse or beneficial. For purposes of Section 106, the determination would be *no adverse effect*.	Adverse impact(s) would involve disturbance of a site(s) that results in little, if any, loss of integrity. Beneficial impact(s) would involve maintenance and preservation of a site(s). For purposes of Section 106, the determination would be *no adverse effect.*	Adverse impact(s) would involve disturbance of a site(s) that results in a partial loss of integrity. Beneficial impact(s) would involve stabilization of a site(s). For purposes of Section 106, the determination for adverse impacts would be *adverse effect.* The determination for beneficial impacts would be *no adverse effect.*	Adverse impact(s) would involve disturbance of a site(s) that results in a total loss of integrity. Beneficial impact(s) would involve active intervention to preserve a site(s). For purposes of Section 106, the determination for adverse impacts would be *adverse effect.* The determination for beneficial impacts would be *no adverse effect.*

Impact Topic	Duration	Negligible	Minor	Moderate	Major
Sacred Sites	Short-term – The impacts would be primarily associated with construction-related activities. Long-term – Impacts would be semi-permanent to permanent changes to the Monument's archaeological resources	Impact would barely be measurable with no perceptible consequences, either adverse or beneficial, to sacred sites.	Adverse impacts would result in little, if any, loss to the significance or integrity of the National Register eligibility of the site. A beneficial impact would maintain and preserve the site.	Any disturbance that would diminish the significance or integrity of the site to the extent that its National Register eligibility is jeopardized would be considered an adverse impact. Beneficial impacts would further stabilize the site.	Adverse impacts would include actions that would diminish the significance and integrity of the site to the extent that it is no longer eligible to be listed in the National Register. Beneficial impacts would include any active intervention to preserve a site.
Indian Trust Resources	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	Little or no noticeable change in Indian Trust Resources that is acceptable to the Grand Portage Reservation Tribal Council.	Local changes in Indian Trust resources that are acceptable to the Grand Portage Reservation Tribal Council.	Large changes in Indian Trust resources that are acceptable to the Grand Portage Reservation Tribal Council.	Any change in Indian Trust Resources that is not acceptable to the Grand Portage Reservation Tribal Council.
Wildlife and Habitats	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	Wildlife and their habitats would not be affected, or the effects would be at or below the level of detection and would not be measurable or of perceptible consequence to wildlife populations.	Effects on wildlife or habitats would be measurable or perceptible but localized within a small area. While the mortality of individual animals might occur, the viability of wildlife populations would not be affected, and the community, if left alone, would recover.	A change in wildlife populations or habitats would occur over a relatively large area. The change would be readily measurable in terms of abundance, distribution, quantity, or quality of population. Mitigation measures would be necessary to offset adverse effects and would likely be successful.	Effects on wildlife populations or habitats would be readily apparent and would substantially change wildlife populations over a large area in and out of the Park. Extensive mitigation would be needed to offset adverse effects, and the success of mitigation measures could not be assured.

Impact Topic	Duration	Negligible	Minor	Moderate	Major
Endangered, Threatened, or Protected Species and Critical Habitats (Note: The italic type represents the wording required by Section 7 of the Endangered Species Act of 1973 [16 USC 1531 et seq.] for quantifying potential effects on listed species.)	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	May have a slight impact on habitat not designated as critical habitat or not known to have the listed species present.	*May Affect/Is Not Likely to Adversely Affect* – Effects on listed, proposed, or protected species or designated critical habitat would be discountable (that is, adverse effects are unlikely to occur or could not be meaningfully measured, detected, or evaluated) or completely beneficial.	*May Affect/Is Likely to Adversely Affect* – Adverse effects on listed, proposed, or protected species or designated critical habitat might occur as a direct or indirect result of the Project, and the effect would not be discountable or completely beneficial. Moderate impacts on species would result in a local population decline due to reduced survivorship, declines in population, and/or a shift in the distribution; no direct casualty or mortality would occur.	*Likely to jeopardize the continued existence of a species/Adversely modify critical habitat* – Effects could jeopardize the continued existence of listed, proposed, or protected species or adversely modify designated critical habitat within and/or outside the Park. Major impacts would involve a disruption of habitat and breeding grounds of listed, proposed, or protected species such that direct casualty or mortality would result in removal of individuals of a listed, proposed, or protected species from the population.
Vegetation	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	Individual native plants may be affected, but measurable or perceptible changes in plant community size, integrity, or continuity would not occur.	Effects on native plants would be measurable or perceptible but would be localized within a small area. The viability of the plant community would not be affected, and the community, if left alone, would recover.	A change would occur to the native plant community over a relatively large area that would be readily measurable in terms of abundance, distribution, quantity, or quality. Mitigation measures to offset or minimize adverse effects would be necessary and would likely be successful.	Effects on native plant communities would be readily apparent and would substantially change vegetative community types over a large area. Extensive mitigation would be necessary to offset adverse effects, and their success would not be assured.

Impact Topic	Duration	Negligible	Minor	Moderate	Major
Air Quality	Short-term – Effects last only for the duration of Project implementation. Long-term – Effects last beyond the period of Project implementation.	Impacts would not be detectable or measurable. Visibility would not be affected.	Impacts on air quality would be measurable but would not exceed the maximum allowable increase for a Class II area.[1] Visibility would be within the range of historical conditions.	Changes in air quality would be readily apparent but would not exceed or would meet the maximum allowable increase for a Class II area. Air quality would be outside historic baseline on a limited basis. Mitigation would be necessary to offset adverse effects and would likely be successful.	Changes in air quality would be readily measurable and would meet or exceed the maximum allowable increase for a Class II area. Extensive mitigation measures would be necessary, and their success would not be assured.
Soundscape Management	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year	Natural sounds would prevail; equipment and human-generated noise would be very infrequent or absent, mostly immeasurable.	Natural sounds would predominate in areas where management objectives call for natural processes to predominate, with equipment and human-generated noise infrequent at low levels. In areas where equipment and human-generated noise is consistent with park purpose and objectives, natural sounds could be heard occasionally.	In areas where management objectives call for natural processes to predominate, natural sounds would predominate, but equipment and human-generated noise could occasionally be present at low to moderate levels. In areas where equipment and human-generated noise is consistent with park purpose and objectives, equipment and human-generated noise would predominate during daylight hours and would not be overly disruptive to noise-sensitive visitor activities in the area; in such areas, natural sounds could still be heard occasionally.	In areas where management objectives call for natural processes to predominate, natural sounds would be impacted by equipment and human-generated noise sources frequently or for extended periods of time. In areas where equipment and human-generated noise is consistent with park purpose and zoning, the natural soundscape would be impacted most of the day; noise would disrupt conversation for long periods of time; and/or make enjoyment of other activities in the area difficult; natural sounds would rarely be heard during the day.

Impact Topic	Duration	Negligible	Minor	Moderate	Major
Water Quality	Short-term – Following completion of the Project, recovery would take less than 1 year. Long-term – Following completion of the Project, recovery would take more than 1 year.	Impacts would not be detectable. Water quality parameters would be well within all water quality standards for the designated use of the water. Water quality would be within the range of historical conditions.	Impacts would be measurable, but water quality parameters would be well within all water quality standards for the designated use. Water quality would be within the range of historical conditions.	Changes in water quality would be readily apparent, but water quality parameters would be within all water quality standards for the designated use. Water quality would be outside historic baseline on a limited basis. Mitigation would be necessary to offset adverse effects and would likely be successful.	Changes in water quality would be readily measurable, and some quality parameters would periodically be equaled or exceeded. Extensive mitigation measures would be necessary, and their success would not be assured.

Note:
[1] *The Monument is a Class II area, which is allowed moderate deterioration of air quality, under the Clean Air Act of 1970 (42 USC 7401 et seq.).*

The following three reasonably foreseeable future projects are located outside of the Monument boundary and were considered in the cumulative impact analysis for the Project:

- Development of the nearby Grand Portage State Park and further promotion of tourism in the northern areas of Minnesota.
- Construction of a formal gateway at the intersection of Minnesota Highway 61 and County Road 17.
- Further development of the Grand Portage Lodge and Casino, RV park, Trading Post, and marina.

3.1.3 Assessing Impacts on Cultural Resources

Impacts on historic archaeological resources, historic structures, cultural landscapes, traditional cultural properties, and collections are described in terms of duration, intensity, type, and context, consistent with CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508). In discussing the intensity of the impacts on cultural resources, both the threshold definitions (that is, negligible, minor, moderate, and major) and language from Section 106 of the National Historic Preservation Act of 1966 (16 USC 470f) as presented in Table 3-1, Impact Topic Threshold Definitions, are used. Compliance with Section 106 includes determination of the area of potential effect, identification of cultural resources present in the area of potential impact that are either listed on or eligible for listing on the NRHP, and application of the Section 106 criteria of adverse effect (36 CFR 800.5(a)(1)) on affected cultural resources either listed on or eligible for listing on the NRHP.

To provide long-term protection for cultural resources listed on or eligible for listing on the NRHP, ways to avoid, minimize, or mitigate adverse impacts are included in the CEQ regulations (40 CFR 1500-1508) and in NPS *Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS, January 8, 2001). These mandates also call for an analysis of the level of impact the mitigation would have in reducing the intensity of a potential impact (for example, reducing the intensity of an impact from major to moderate or minor). These mitigating measures for cultural resources are included in Section 2.5, Resource Protection Measures.

3.1.4 Assessing Impacts on Endangered, Threatened, and Protected Species

The analysis for assessing impacts on endangered, threatened, and protected species involved the following steps:

- Identify the species listed or proposed for listing on the federal list of endangered and threatened wildlife and plants that occur in the Project Area.
- Determine how each species uses the resources within the Project Area.
- Identify the duration and intensity of the impacts on species and their habitats for each alternative, both as a result of the Project and from a cumulative impacts perspective. In discussing the intensity of the impacts on endangered, threatened, and protected species, both the threshold definitions (that is, negligible, minor,

moderate, and major) and language from Section 7 of the Endangered Species Act of 1973 (16 USC 1531 et seq.), as presented in Table 3-1, Impact Topic Threshold Definitions, are used.

3.1.5 Prohibition of Impairment of Park Resources and Values

Impairment of NPS resources is prohibited by the Organic Act of 1916 (16 USC 1 et seq.) and the General Authorities Act of 1970 (16 USC 1a-1 et seq.). Guidance on addressing the impairment of Park resources is provided in NPS *Management Policies 2001* (NPS, December 2000). According to this guidance, an 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. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts." In addition, impacts are more likely to be an impairment if the conservation of the resource or value 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" (NPS, December 2000).

Impairment may result from NPS activities in managing the Monument, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the Park. A determination on impairment is made in the discussion of impacts for all impact topics except public health and safety, visitor use and experience, and socioeconomics. According to the Organic Act, public health and safety, visitor use and experience, and socioeconomics cannot be impaired in the same way that Park resources and values can. That is, NPS keeps the resources and values of national park units unimpaired so that visitors may experience and enjoy those resources and values.

3.2 PUBLIC HEALTH AND SAFETY

3.2.1 Regulations and Policies

Impacts on public health and safety are evaluated in accordance with NPS *Management Policies 2006* (NPS August 2006). The storage, use, and transportation of hazardous materials and wastes is subject to the Resource Conservation and Recovery Act, the Hazardous Material Transportation Act, provisions of the Occupational Safety and Health Act, the Pollution Prevention Act, the Toxic Substances Control Act, and the Minnesota State Hazardous Waste and Tank Rules.

3.2.2 Affected Environment

To protect public health and safety within the Monument, the NPS Division of Law Enforcement and Emergency Services provides police and emergency services. At the current maintenance and housing facilities there are minor to potentially moderate public health and safety concerns.

In the Project Area, current safety concerns are as follows:

- The existing maintenance facility is located along Upper Road (County Road 17) about 200 feet east of the Grand Portage Trail. Hazardous material, including fuels, oil, and lubricants, is stored within a storage shed within the facility. Construction materials and equipment are stored at the outdoor storage yard, located along Lower Road about 1,400 feet east of the current maintenance facility. There is no known contamination at the existing maintenance facility or outdoor storage yard.
- During the 10-year period (1998 to May 2009) for which data is available from the Pipeline and Hazardous Materials Safety Administration (PHMSA), there have not been any hazardous material transportation incidents within the Grand Portage Reservation or the Monument (PHMSA undated). However, with fuels and other regulated materials stored in close proximity to the Grand Portage Trail, the potential exists for an incident to occur that would affect the visiting public.
- The current maintenance facility location has a blind entrance to Mile Creek Road.

The NPS has minimized the safety and health risk associated with the current outdoor storage yard site by constructing a chain-linked fence to block public access to the storage site.

The Store Road Site is situated in a cleared site (approximately 2 acres) in a wooded area. The Band offices for Natural Resources and Forestry are located to the north of the Store Road Site and several residences and businesses are located along Store Road to the south of the Store Road Site. The existing pole barn at the Store Road Site was built in the 1980s and there are no known asbestos or lead-based paint issues (Cooper March 3, 2009). Construction vehicles (heavy equipment) and materials are currently stored at this site. Vehicle maintenance is not performed at this site. The Store Road Site has been used for minor repairs of mobile homes; several mobile homes have been temporarily located at this site. Small amounts of paints (stored in 5 gallon buckets) and other hazardous materials are stored in the pole barn, but there are no signs of spillage, such as stained soils (HDR May 11, 2009). There are no activities or conditions at the site that would warrant conducting further investigation of regulated materials.

There are no Superfund sites in the vicinity of the Store Road Site. The Grand Portage Transfer Station is located approximately 0.5 miles to the northwest of the site (Minnesota Pollution Control Agency undated a). If any contamination is present at the site, it is unlikely that it would spread to the Store Road Site, or if present, it would be

located at or below the water table.[1] A leaking underground storage tank (LUST) is reported at 101 Store Road, approximately 500 feet to the south of the Store Road Site. The site (leak number 16616) was closed by the Minnesota Pollution Control Agency (MPCA) on February 28, 2007. Contaminated soil was reported remaining at the site, but no offsite contamination, free product, or groundwater contamination remained (Minnesota Pollution Control Agency undated b). Surface and groundwater flow from the LUST site is to the southeast, away from the Store Road Site.

A LUST (leak number 16618) is also reported at the Voyageur Marina at 1 Restful Place; this area is approximately 300 feet southwest of the existing seasonal housing units proposed for replacement. Although some soil and groundwater contamination was discovered during removal of two underground storage tanks, the levels of contamination were below risk criteria, and the site was closed by MPCA on August 10, 2007, with no further action required.

The Stevens Road Site is undeveloped; there are no buildings or any indications of regulated material usage or storage. The site is located approximately 2,100 feet southwest of the existing maintenance facility and 2,900 feet southwest of the existing outdoor storage yard.

3.2.3 Impacts of Alternative A – No-Action

Under Alternative A – No-Action, the existing adverse conditions listed in Section 3.2.2, Affected Environment, would continue. Alternative A – No-Action would fail to address existing safety concerns, and collectively, these conditions would produce long-term, minor to potentially moderate, adverse, local impacts.

Cumulative Impacts

Alternative A – No-Action would retain the current conditions of the Monument and there would be no new development associated with the existing maintenance facility, outdoor storage yard, or seasonal housing; public health and safety would be unchanged. Alternative A – No-Action would not contribute to cumulative impacts in the area because no action would be taken.

Conclusion

Alternative A – No-Action alone would have a minor to potentially moderate impact on public health and safety. Inefficiencies of operating the maintenance and outdoor storage yard at separate locations (with trips between the sites) would continue, with a slight risk of accidents. Existing safety precautions associated with the outdoor storage yard site would remain.

[1] The closest U.S. Geological Survey groundwater station well to the Store Road Site is located approximately 1.5 miles to the southeast. The depth to groundwater has been measured at 28 feet below ground surface.

3.2.4 Impacts of Alternative B – Store Road Site

Construction of the proposed facilities would produce short-term low levels of risk to Monument visitors, staff, and local residents with the use of construction equipment and increased truck traffic on Monument and local roads. Prior to construction and development of Alternative B – Store Road Site, the pole barn would be moved to an appropriate Tribal storage facility. Any hazardous material stored at the site would be moved to the current maintenance facility during construction. No spills have been reported at the site, contamination from surrounding sites is not likely to impact the site, and there was no contamination observed during the site visit. If any soil contamination is encountered during construction activities, notification of the proper agencies and proper handling and disposal of any contaminated soil or groundwater (including decontamination of equipment) would be warranted.

The depth of excavation for the proposed construction would likely extend to several feet below ground surface and excavation would not encounter groundwater.

The proposed development of the new maintenance and seasonal housing would require equipment, construction materials, and hazardous materials stored at the existing outdoor storage yard site and maintenance facility to be transported to the Store Road Site. Movement of this equipment and materials would present a slight risk for accidents along roads used for transport. Hazardous material would be transported in accordance with the Hazardous Materials Transportation Act (49 USC 5101 et seq.) and Federal hazardous material regulations (49 CFR 171 et seq.). Compliance with these regulations would minimize potential hazards. Equipment and hazardous materials would be transported along Bay Road and Store Road.

The use of construction equipment, increased truck traffic, and brief interference with traffic flow could produce potential safety hazards. Risks would be limited by providing information on the construction activities to visitors, placing barriers near construction zones, controlling traffic, and increasing the presence of Monument staff. Overall, Alternative B – Store Road Site would have a short-term, minor adverse impact on public health and safety by the transport of equipment and regulated materials, and construction/demolition activities at the proposed Store Road Site, with a long-term, minor to moderate, beneficial, local impact resulting from the separation of conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site (the distance from the maintenance facility to the Trail would increase from 200 feet to 700 feet).

Cumulative Impacts

To evaluate cumulative impacts on public health and safety, the impacts of the Project were considered in conjunction with the impacts of past, present, and reasonably foreseeable future projects in the Monument. Alternative B – Store Road Site would result in the construction of new facilities along Store Road, and the potential future redevelopment of the properties currently hosting the maintenance and housing facilities. The redevelopment of the existing facilities would have the potential to adversely affect public health and safety as a result of demolition and clean-up of the maintenance and housing buildings, and the possible construction associated with redevelopment of the

maintenance and housing properties. No known contamination exists at the current maintenance facility and storage yard, nor at the seasonal housing area near Voyageur Marina. Existing LUST sites have low levels of contamination and are sufficiently distant to not cause contamination at the existing facilities.

Cleanup of the existing maintenance facility and outdoor storage yard would be completed in accordance with all applicable regulations. Cumulatively, this alternative would have short-term, minor, adverse impacts on public health and safety and long-term minor beneficial impacts to public health and safety from the separation of conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site. A slight risk of accidents would continue, but the impacts would be minimized by compliance with applicable regulations and by the increased distance from the maintenance facility and the Grand Portage Trail and other surrounding land uses.

Conclusion

Alternative B – Store Road Site would have a minor short-term adverse impact on public health and safety. The safety concerns would result from the transportation of equipment and regulated materials along the direct route from the existing outdoor storage yard to the proposed Store Road maintenance facility, and the construction of the maintenance facility and housing development. A long-term beneficial impact to public health and safety would result from a lower risk of accidents and hazardous material spills from the separation of conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site. A slight risk of accidents would continue, but the impacts would be minimized by compliance with applicable regulations. Cumulative impacts would also have a minor adverse impact to public health and safety due to the potential redevelopment of the existing properties.

3.2.5 Impacts of Alternative C – Stevens Road Site

Under Alternative C – Stevens Road Site, the public health and safety concerns would be similar to the concerns mentioned in Section 3.2.4, Impacts of Alternative B – Store Road Site. The proposed construction of the access road from Stevens Road to the proposed site and the construction of the maintenance facility and housing development would cause minor safety concern for Monument visitors, local residents, and Monument staff. Soil contamination is not anticipated to be encountered during construction. The transport of construction equipment and material stored at the existing outdoor storage yard and maintenance facility would be of safety concern to Monument visitors, local residents, and Monument staff. Similar to Alternative B – Store Road Site, all transportation of regulated material would be conducted in accordance with the Hazardous material Transportation Act and hazardous material regulations. Compliance with these regulations would minimize potential hazards.

A long-term beneficial impact to public health and safety would result from a lower risk of accidents and hazardous material spills from the separation of conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site (the distance from the maintenance facility to the Trail would increase from 200 feet to 1,700 feet). However, fire protection would be more difficult to provide to the Stevens Road Site, as it is located farther from emergency services, resulting in a minor adverse

impact to public safety. Overall, Alternative C – Stevens Road Site would have a short-term minor to moderate adverse impact and a long-term minor beneficial impact on public health and safety.

Cumulative Impacts

Redevelopment of the existing maintenance and housing properties could impact the public health and safety of Monument residents, staff, and visitors. Demolition, removal of debris, and construction of new facilities would potentially affect the public health and safety of Monument residents, visitors, and Monument staff. Cumulatively, this alternative would have short term, minor, adverse impacts and minor long-term beneficial impacts (through a more compatible use of the site) on public health and safety.

Conclusion

Alternative C – Stevens Road Site would have short-term minor adverse impact on public health and safety. The safety concerns would result from construction activities at the Stevens Road Site, the transportation of equipment along Stevens Road and the access road leading to the proposed building site, and for providing emergency services to the site. The redevelopment of the existing maintenance and housing properties would have minor adverse impact on public health and safety. Long-term beneficial impacts would result from separation of incompatible land uses and redevelopment of the site with a more compatible use.

3.3 SOCIOECONOMICS

3.3.1 Regulations and Policies

Impacts on socioeconomics are evaluated in accordance with CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), which directs economic analyses of federal actions that would affect local or regional economies, as well as NPS *Management Policies 2006* (NPS August 2006).

3.3.2 Affected Environment

Over the last ten years, Grand Portage Monument averaged 73,000 visitors per year with the vast majority visiting during the months of May through October. Of those visitors, most travel an hour to reach the monument and many travel two or more hours (NPS 2005).

The analysis of impacts on socioeconomics focuses on the communities potentially impacted by the Project. The Monument is located within Cook County, Minnesota and background socioeconomic data is analyzed at the county and sub-county level to evaluate the socioeconomic impact on local residents and Monument users.

Socioeconomic information regarding Cook County is as follows:

- Cook County is 1,451 square miles and is home to 5,398 people. This equates to an average of less than one person per acre and is well below the average of 79.56 persons per acre in the United States, respectively (U.S. Census Bureau July 10, 2008; U.S. Census Bureau 2000).

- This area is geographically isolated from most major communities, the nearest being Thunder Bay, Ontario with a population of 120,000 located 50 miles away (Heritage Center EA). Duluth, Minnesota, with a population of 84,400 is located about 150 miles to the southwest (U.S. Census Bureau July 10, 2008).
- In 1999, the median household income of Cook County was $36,640. This equates to 77 percent of the $47,111 Minnesota statewide median household income and 87 percent of the $41,994 nationwide median household income (U.S. Census Bureau 2000).
- Of the 3,117 persons in the labor force in May 2009, 246 (7.9 percent) were unemployed. The county's unemployment rate is slightly elevated from the statewide rate of 7.8 percent, but below the national rate of 9.1 percent (Minnesota Department of Employment and Economic Development undated).
- Of the workers who are 16 years of age or older in Cook County, 79 percent commute to work by personal car, truck, or van (U.S. Census Bureau 2000).
- Employment by industry in Cook County, as compiled by the U.S. Census Bureau, is shown in Table 3-2, below.

Table 3-2
Employment of Population by Industry

Industry	Cook County		Minnesota
	Number of Workers	Percentage of Workers	Percentage of Workers
Total workers, 16 years and older	2,668	-	-
Agriculture, forestry, fishing and hunting, and mining	102	3.8	2.6
Construction	293	11.0	5.9
Manufacturing	165	6.2	16.3
Wholesale trade	28	1.0	3.6
Retail trade	341	12.8	11.9
Transportation and warehousing, and utilities	161	6.0	5.1
Information	53	2.0	2.5
Finance, insurance, real estate, rental, and leasing	61	2.3	7.2
Professional, scientific, management, administrative, and waste management services	158	5.9	8.8
Educational, health, and social services	442	16.6	20.9
Arts, entertainment, recreation, accommodations, and food services	574	21.5	7.2
Other services	93	3.5	4.6
Public administration	197	7.4	3.4

Source: U.S. Census Bureau, 2000.

The economy of Cook County is more dependent upon the arts, entertainment, recreation, accommodation, and food services and the construction sectors of total employment than the State of Minnesota (U.S. Census Bureau 2000). The Grand Portage Lodge and Casino is the largest employer on the Reservation (Woolpert LLP and Grand Portage National Monument March 2004).

There are currently 265 Band members living on the Reservation. Of this population, 114 are less than 18 years of age and 75 are greater than 65 years of age. The unemployment rate of the labor force is 2 percent, lower than Cook County (Grand Portage Reservation Tribal Council June 17, 2009).

3.3.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not develop the maintenance facility or the seasonal housing and would have negligible effect on the local population and the regional economy. Implementation of this alternative would not create any short-term construction opportunities or have any long-term economic benefits to the region; however there would be no overall loss of job opportunities either.

Cumulative Impacts

Under Alternative A – No-Action the redevelopment of the current maintenance facility and outdoor storage sites would not occur and current economic conditions would remain the same. Job opportunities and job loss would be unchanged and impacts would be negligible. Leaving the current maintenance facility and outdoor storage yard sites in their current locations would have a negligible to minor adverse impact on other reasonably foreseen future projects to promote tourism in the local area because an incompatible use would remain in the core area of the Monument, limiting redevelopment of the Monument stockade area.

Conclusion

Alternative A – No-Action would have negligible impacts on the regional socioeconomics.

3.3.4 Impacts of Alternative B – Store Road Site

Alternative B – Store Road Site calls for construction of the maintenance facility and seasonal housing, this would create short-term job opportunities during the construction period. This would have a short-term, minor, beneficial impact to the local and regional economy. Band members in the labor force would potentially benefit through a short-term increase in construction labor opportunities. The proposed seasonal housing would allow more living space for NPS employees and if more housing is available for employees, additional employment could be possible. The Store Road site would be leased from the Band by NPS, providing an economic benefit to the Band.

Construction of the proposed maintenance facility, storage yard, and seasonal housing would present the possibility of redeveloping the existing maintenance, storage yard, and housing sites. The existing maintenance and housing facilities are located on prime lake front real estate and Alternative B – Store Road Site could potentially result in the demolition of the existing sites followed by new development, creating new job

opportunities and increasing the visual aesthetics of the lake front property. Alternative B – Store Road Site would have minor to moderate beneficial impacts on socioeconomics.

Cumulative Impacts

The implementation of Alternative B – Store Road Site would create the possibility of redeveloping the existing maintenance, outdoor storage yard, and housing properties. Redevelopment would create job opportunities for Band members and would enhance opportunities to improve tourism through an improved visitor experience. Potentially improving tourism could provide economic benefits (through increased revenues) to area attractions, such as improvements to the Grand Portage Lodge and Casino. Overall, Alternative B – Store Road Site, would have a minor to moderate beneficial impact on socioeconomics.

Conclusion

Alternative B – Store Road Site would have a minor beneficial impact on socioeconomics. Construction-related impacts would be short-term, minor, and beneficial. Overall cumulative impacts associated with redevelopment of lake front properties would be minor and beneficial.

3.3.5 Impacts of Alternative C – Stevens Road Site

Under Alternative C – Stevens Road Site, construction of the access road, maintenance facility, outdoor storage yard, and seasonal housing would create some short-term jobs during the construction period. This would have a short-term, minor, beneficial impact to the regional economy. The benefits associated with Alternative C – Stevens Road Site would be similar to benefits described in Section 3.3.4, Impacts of Alternative B – Store Road Site, with two exceptions: the Stevens Road Site is owned by the NPS and there would not be economic benefits derived from leasing land from the Band, and the cost of extending utilities to the Stevens Road Site would result in a short-term adverse minor impact (although short-term minor economic benefits to construction workers would be generated).

Cumulative Impacts

Alternative C – Stevens Road Site would create the possibility of redeveloping the existing maintenance, storage yard, and housing properties. Redevelopment would create job opportunities for Band members and thus, have a minor beneficial impact on socioeconomics. Similar to Alternative B – Store Road Site, Alternative C – Stevens Road Site could potentially enhance economic opportunities and provide a minor to moderate beneficial socioeconomic impact.

Conclusion

The construction of Alternative C – Stevens Road Site would have a minor beneficial impact on socioeconomics. Construction-related impacts would be short-term, minor, and beneficial. Overall cumulative impacts associated with redevelopment of lake front properties would be minor to moderate and beneficial.

3.4 ENVIRONMENTAL JUSTICE

3.4.1 Regulations and Policies

Executive Order 12898, Federal Actions To Address Environmental Justice in Minority and Low-Income Populations (59 Federal Register [FR] 7629), requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing any disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the U.S. Environmental Protection Agency (EPA), environmental justice is:

> The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including [a] racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (EPA April 1998).

The goal of fair treatment is not to shift risks among populations but to identify potentially disproportionately high and adverse effects and to identify alternatives that may mitigate these impacts.

Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks (62 FR 19883), requires all federal agencies to include an assessment of environmental health or safety risks that may impact children disproportionately as part of any required analysis that the agency must conduct.

3.4.2 Affected Environment

The local population was initially evaluated by comparing the percentage on the Reservation and Trust Lands to the percentage in Cook County to determine if the minority, vulnerable age, and low-income populations on the Grand Portage Reservation and off-Reservation Trust Land is high and/or disproportionately greater than the number in the surrounding region. Census block groups and blocks were determined to contain "significant" minority, vulnerable age, and low-income populations if any of these populations exhibited concentrations that were at least 40 percent higher than the County's percentage of the same population. Population characteristics of the Grand Portage Reservation and off-Reservation Trust Land and Cook County are as follows:

- The Grand Portage Reservation and off-reservation Trust Land is 58 percent American Indian and 36 percent White, with 6 percent of the population reporting two or more races (U.S. Census Bureau 2000). The American Indian population on the Reservation is significantly higher than the percentage within Cook County (8 percent).
- The percentage of Hispanic people (2.0 percent) is also significantly higher than Cook County (0.8 percent).

- The percentage of children (less than 18 years of age) on the Reservation and Trust Lands is somewhat higher than the County, but not significantly (27 percent on the Reservation versus 20 percent in Cook County).
- The percentage of elderly population (65 years of age or greater) on the Reservation and Trust Lands is lower than the County (8 percent on the Reservation versus 15 percent in Cook County).
- The percentage of population below the poverty level on the Reservation and Trust Lands (17.5 percent) is significantly higher than Cook County (10.1 percent).
- Median household income for the white (per their self-identification during the 2000 Census) population in Cook County is $37,877, compared to $29,250 for American Indians (U.S. Census Bureau 2000).

The pow-wow site, located about 0.2 miles south of the Store Road Site, is accessed via Store Road or Housing Road. The traditional cemetery, located about 500 feet north of the Store Road Site, is accessed from Minn. 61, or via a two-track road through the Store Road Site.

The enabling legislation for Grand Portage National Monument (PL 85-910) detailed specific mandates with the Band in exchange for donating a portion of their lands for the Monument. Those mandates were focused on employment opportunities for the Band members, provide unencumbered right to pass through the Monument, and encouragement for handicraft production and sales. More specifically, aspects of the mandates included:

- Section 4 recognizes that members of the Band have preferential privilege to provide visitor accommodations and services such as guide services.
- Section 5 gives first preference to the employment of recognized tribal members for construction or maintenance, or any other service within the Monument for which they are qualified.
- Section 6 encourages recognized tribal members to produce and sell handicraft objects within the Monument.
- Section 7 recognizes the privilege of the Band to traverse the Monument for purposes of logging their land, as a means of access, or fishing.

3.4.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not develop the maintenance facility or the seasonal housing and would not affect the local population. There would not be any disproportionate impact to any population group. The loss of a potential opportunity for construction employment and economic redevelopment would result in a negligible to minor adverse impact to minority and low-income populations and would not fulfill the mandates discussed above.

Cumulative Impacts

Under Alternative A – No-Action the current maintenance facility and outdoor storage yard sites would continue to be used, foreclosing their potential redevelopment. This would have a negligible to minor impact on efforts to enhance the development of tourism at the Monument and in the region. As discussed in Section 3.3.2, the Reservation and Cook County are more dependent upon the tourism and construction industries than the State of Minnesota. The diminishment of a potential opportunity to redevelop an area of the Monument important to tourism would potentially affect the income of the minority and low-income populations in the area by not potentially providing employment opportunities (in accordance with the mandates discussed above) that could result from redevelopment. The short-term and long-term adverse impacts to minority and low-income populations would be minor.

Alternative A – No-Action would not affect access to the pow-wow site or the traditional cemetery.

Conclusion

Alternative A – No-Action would not disproportionately affect minority, vulnerable age, or low-income populations. Cumulative adverse impacts would be minor.

3.4.4 Impacts of Alternative B – Store Road Site

Under Alternative B – Store Road Site, the maintenance facility, storage yard, and the seasonal housing would be constructed. Only minor short-term adverse impacts from construction to various resources have been identified, and the adverse impacts to minority, vulnerable age, and low-income populations would be short-term and minor. The Store Road Site is located on Trust land in an area with a predominately American Indian population. The loss of potentially developable land would be offset by the economic benefits provided by the proposed facilities (discussed in Section 3.3.4) and any long-term adverse impacts would be negligible.

The existing locations of these facilities could potentially be redeveloped to enhance visitor experience and tourism. Construction of the proposed facilities and redevelopment of the maintenance facility and the seasonal housing sites could provide a beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region.

Short-term impacts on access to the pow-wow site or the traditional cemetery would be negligible to minor during construction. Access to these sites would be maintained, but movement of construction vehicles and transporting equipment and other materials on Store Road would affect traffic flow to a minor extent. Long-term impacts to access would be negligible (primarily occurring from a minor increase in traffic on Store Road).

Cumulative Impacts

Construction of the proposed facilities and potential redevelopment of the existing sites would enhance other efforts (see Section 3.1.2) to stimulate tourism at the Monument and in the region. Cumulatively, these efforts to promote tourism could provide a beneficial

minor to moderate beneficial impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region.

Conclusion

Some short-term minor adverse impacts would occur during construction, but these would be offset by short- and long-term minor beneficial impacts. Cumulative short- and long-term impacts would be beneficial. There would be no disproportionate adverse impacts to minority, vulnerable age, or low-income populations.

3.4.5 Impacts of Alternative C – Stevens Road Site

Only minor short-term adverse impacts from construction to various resources have been identified, and the adverse impacts to minority, vulnerable age, and low-income populations would be short-term and minor. The Stevens Road Site is located on NPS land; however, Trust land in an area with a predominately American Indian population would be required to construct an access road to the site. The loss of potentially developable land would be offset by the economic benefits provided by the proposed facilities (discussed in Section 3.3.4) and any long-term adverse impacts would be negligible.

The existing locations of the maintenance and housing facilities could potentially be redeveloped to enhance visitor experience and tourism. Similar to Alternative B – Store Road Site, construction of the proposed facilities and redevelopment of the maintenance facility, storage yard, and the seasonal housing sites could provide a beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region.

Access to the traditional cemetery would not be impacted by this Alternative. Access to the pow-wow site would be minimally affected by a short-term increase in traffic, but the impact would be negligible.

Cumulative Impacts

Construction of the proposed facilities and potential redevelopment of the existing sites would enhance other efforts (see Section 3.1.2) to stimulate tourism at the Monument and in the region. Cumulatively, these efforts to promote tourism could provide a beneficial minor to moderate beneficial impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region.

Conclusion

Some short-term minor adverse impacts would occur during construction, but these would be offset by short- and long-term minor beneficial impacts. Cumulative short- and long-term impacts would be beneficial. There would be no disproportionate adverse impacts to minority, vulnerable age, or low-income populations.

3.5 OTHER AGENCY OR TRIBAL LAND USE PLANS OR POLICIES

3.5.1 Regulations and Policies

In accordance with NPS *Management Policies 2006* (NPS, August 2006), the evaluation of projects for impacts on other agency or tribal land use plans or policies is required. In addition to the NPS General Management Plan for the Grand Portage National Monument (NPS 2003), the Band issued Ordinance Number 95-02 (Grand Portage Land Use Management Task Force 1996), which is the land use ordinance for the reservation.

3.5.2 Affected Environment

The Project is located within the Grand Portage Reservation in an area with NPS and Indian Trust Lands. The Store Road Site and the access road location for the Stevens Road Site are located on Indian Trust land. Regardless of land ownership, all land within the Grand Portage Reservation is subject to the Band-issued land use ordinance. The existing maintenance building and outdoor storage area are in the parks and recreation district, as is all Monument property. The current NPS seasonal housing is located in a commercial district.

3.5.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not result in any activities subject to the Band's land use ordinance because a new maintenance facility and linked dormitory buildings would not be constructed and no land use changes would occur.

Cumulative Impacts

Alternative A – No-Action would not contribute to cumulative impacts on other agency or tribal land use plans or policies because no action would be taken.

Conclusion

Alternative A – No-Action would not result in any action subject to the Band's land use ordinance and therefore would have no effect on other agency or tribal land use plans or policies.

3.5.4 Impacts of Alternative B – Store Road Site

The Store Road Site is located in a residential district (Grand Portage Land Use Management Task Force 1996). The current equipment and materials storage use by the Band has been accepted by Grand Portage Trust Lands and Resources and the RTC. Also, Grand Portage Trust Lands and Resources have their office building and fire equipment on the land to the north of the Store Road Site, which is also in the residential land use district. Alternative B – Store Road Site would result in modification of the land use of the existing site used by the Band to NPS seasonal housing and a maintenance facility including equipment and materials storage, which is currently occurring on the site. This site was recommended by the RTC for development of the maintenance facility and seasonal housing. Therefore, the official variance application as described in Band Ordinance Number 95-02, Article 15, is anticipated to be approved by Grand Portage Trust Lands and Resources and the RTC to construct the maintenance facility in the

residential district. In addition, construction of this alternative would move the NPS seasonal housing from a commercial district to a residential district.

Cumulative Impacts

The construction of Alternative B – Store Road Site would result in the construction of a non-residential structure in a residential land use district, but the area is currently being used for non-residential uses. This site has been recommended by the RTC and the construction of a maintenance facility would not be the first non-residential use in the residential district (Grand Portage Trust Lands and Resources have their office building and fire equipment). However, it would make a negligible contribution to the impact on other agency or tribal land use plans or policies because the site would continue to be used for materials and equipment storage in addition to NPS seasonal housing.

Conclusion

The construction of Alternative B – Store Road Site would result in the construction of an industrial structure in a residential land use district, but the area is currently being used for non-residential uses. Therefore, the impact of Alternative B – Store Road Site would be negligible on other agency or tribal land use plans or policies with the approval of Grand Portage Trust Lands and Resources and the RTC to continue using the site for industrial purposes while adding a residential use to a portion of the site. Construction of this alternative would also make a negligible contribution to cumulative impacts on other agency or tribal land use plans or policies.

3.5.5 Impacts of Alternative C – Stevens Road Site

The Stevens Road Site is located in a parks and recreation district. The access road on Band land is in a residential district. Alternative C – Stevens Road Site would result in the conversion of Monument Property that is currently in a natural state to a developed property with use by both the Monument and the RTC. These uses are compatible with the Band-issued Ordinance Number 95-02, Article 8.10 for parks and recreation district lands as conditional uses with a Band conditional use permit (Grand Portage Land Use Management Task Force 1996).

Cumulative Impacts

The construction of Alternative C – Stevens Road Site would result in the construction of an industrial structure and residential structure in a parks and recreation land use district that is currently in a natural state. While no other ground disturbing projects are planned in the area, the construction of this site and introduction of human disturbance into this previously undisturbed area would make the future development of other lands in this portion of the parks and recreation district more likely. Therefore, Alternative C – Stevens Road Site would have a minor contribution to cumulative impacts on other agency or tribal land use plans or policies.

Conclusion

The construction of Alternative C – Stevens Road Site would result in the construction of an industrial structure in a park and recreation land use district. Therefore, the impact of Alternative C – Stevens Road Site would be minor on other agency or tribal land use

plans or policies with the approval of Grand Portage Trust Lands and Resources and the RTC for the construction of an access road, maintenance facility, and NPS seasonal housing. Construction of this alternative would also make a minor contribution to cumulative impacts on other agency or tribal land use plans or policies.

3.6 CULTURAL RESOURCES

3.6.1 Regulations and Policies

Impacts on cultural resources are evaluated in accordance with Section 106 of the National Historic Preservation Act of 1966 (16 USC 470f) and NPS *Management Policies 2001* (NPS, December 2000) as well as the following regulations and policies:

- American Antiquities Act of 1906 (16 USC 431-433)
- Archaeological and Historic Preservation Act of 1974 (16 USC 469-469c)
- Archaeological Resources Protection Act of 1979 (16 USC 470aa et seq.)
- Executive Order 11593, Protection and Enhancement of the Cultural Environment (36 FR 8921)
- Executive Order 13007, Indian Sacred Sites (61 FR 26771)
- Historic Sites Act of 1935 (16 USC 461-467)
- Native American Graves Protection and Repatriation Act of 1990 (25 USC 32)
- NPS *Director's Order 24: NPS Museum Collections Management* (August 21, 2000)
- NPS *Director's Order 28: Cultural Resource Management* (June 11, 1998)
- NPS *Museum Handbook* (Part I, Museum Collections; Part II, Museum Records; Part III, Museum Collections Use)
- Presidential Memorandum on Government-to-Government Relations with Native American Tribal Governments (59 FR 22951)
- Protection of Historic Properties (36 CFR 800)
- Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716)
- Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (Birnbaum and Peters, 1996)

3.6.2 Affected Environment

As noted in Section 1.1, Introduction, the project area has a rich history. The landing place and 8.5-mile portage up to the interior waterways was very important to Native Americans prior to and since European contact, and to European and American fur traders, and its environs have been the subject of archaeological investigations since the 1930s, when archaeologists from the Minnesota Historical Society conducted excavations at the request of the U.S. Indian Service (Woolworth 1964). As a result of the site's

significance, archaeological data recovery investigations in the 1960s and 1970s played a prominent role in the development of the interpretive mission and physical plant of the current facility (Woolworth 1964, 1968, 1969, 1975, and 1993). In addition, an ongoing mission of the NPS to identify historic properties under their jurisdiction prompted at least two management surveys that reviewed various areas within the Monument boundaries (Noble 1997; Birk 2006). Other synthetic and secondary papers and reports tell the story of the Monument and the efforts there to identify historic properties (Thompson 1969; Cockrell 1983; Clark 1999; Cooper 2004; Hamilton et al. 2004; White 2004, 2005; and Birk 2005).

The Store Road Site has not been the subject of an archaeological or standing structure inventory. The existing structure at the location, a single metal pole barn, dates from the 1980s and is probably not eligible for listing on the NRHP because it is less than 50 years old and is not likely to be of exceptional importance to be considered eligible for listing.

Noble (1997) conducted a field investigation of the Stevens Road Site and identified no archaeological resources. Noble also performed survey for an access road stemming from the driveway of the adjacent private parcel; no archaeological resources were identified. No standing structures were identified at this location or on the access road alignment evaluated in 1997. The currently proposed access road alignment, west and north of the site to Stevens Road, has not been the subject of an archaeological or standing structures inventory.

3.6.3 Impacts of Alternative A – No-Action

Under Alternative A – No-Action, no improvements would be made at either the Store Road Site or the Stevens Road Site. Therefore, Alternative A – No-Action would have no effect or impact on archaeological sites or historic structures.

Cumulative Impacts

To evaluate cumulative impacts on cultural resources, the impacts of the Project were considered in conjunction with the impacts of past, present, and reasonably foreseeable future projects in the Park. Although other past, present, and reasonably foreseeable future projects may affect cultural resources, Alternative A – No-Action would not contribute to the effects of the other projects. Consequently, there would be no cumulative impacts on cultural resources under Alternative A – No-Action.

Conclusion

Alternative A – No-Action would not affect or impact cultural resources as no new disturbance would be initiated in the Project Area. In addition, Alternative A – No-Action would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. Alternative A – No-Action would make no contributions to the potential for adverse effects on the region's cultural resources, so there would be no cumulative impact.

3.6.4 Impacts of Alternative B – Store Road Site

Because the Store Road Site has been utilized since the early 1980s and was apparently cleared and grubbed prior to its use, there is little potential for the location to hold intact archaeological resources.

No archaeological sites have been identified or are suspected to be within the confines of the Store Road Site. The pole barn is the only structure at the site and, based on the rationale provided in Section 3.6.2, is probably not eligible for the NRHP.

Cumulative Impacts

To evaluate cumulative impacts on cultural resources, the impacts of the Project were considered in conjunction with the impacts of past, present, and reasonably foreseeable future projects in the Park. Because construction of Alternative B – Store Road Site would not impact or affect any historic properties, this alternative would not have a contribution to cumulative impacts associated with subsequent projects.

Conclusion

Construction activities at the Alternative B – Store Road Site would have no effect or impact on historic properties.

3.6.5 Impacts of Alternative C – Stevens Road Site

No archaeological sites have been identified or are suspected to be within the confines of the Stevens Road Site. No NRHP-eligible standing structures are at the location. The proposed access road between the location and Stevens Road has not been surveyed for archaeological resources or standing structures.

Cumulative Impacts

To evaluate cumulative impacts on cultural resources, the impacts of the Project were considered in conjunction with the impacts of past, present, and reasonably foreseeable future projects. Because construction of Alternative C – Stevens Road Site would not impact or affect any historic properties, this alternative would not have a contribution to cumulative impacts associated with subsequent projects.

Conclusion

Construction activities at the Alternative C – Stevens Road Site would have no effect or impact on historic properties based on the current knowledge of the site area. Should this alternative be selected, however, an archaeological resources and standing structures survey along the proposed access road should be completed prior to construction.

3.7 SACRED SITES

3.7.1 Regulations and Policies

In accordance with NPS Management Policies 2006 (NPS, August 2006), projects require an evaluation for impacts on sacred sites. Compliance with Executive Order 13007, Indian Sacred Sites, is required for federal lands, which includes accommodation of

access to and avoidance of adversely affects on the physical integrity of sacred sites, and maintenance of sacred site confidentiality.

3.7.2 Affected Environment

One Ojibwe Midewiwin sacred site may be located on NPS property, but the exact location of the site is not public information (NPS, 2003); the site is approximately 0.5 mile from the Store Road and Stevens Road sites and is well outside the area of potential effect. No other sacred sites have been identified in the project area. A portion of Mt. Rose is another Ojibwe sacred site.

3.7.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would have no effect on sacred sites as current conditions would persist.

Cumulative Impacts

Alternative A – No-Action would not contribute to cumulative impacts on sacred sites since it would have no effect on sacred sites.

Conclusion

Alternative A – No-Action would have no effect or cumulative impact on sacred sites.

3.7.4 Impacts of Alternative B – Store Road Site

Alternative B – Store Road Site would have no effect on sacred sites as there are no known sacred sites in the vicinity of the project location for this alternative.

Cumulative Impacts

Alternative B – Store Road Site would not contribute to cumulative impacts on sacred sites since it would have no effect on sacred sites.

Conclusion

Alternative B – Store Road Site would have no effect or cumulative impact on sacred sites.

3.7.5 Impacts of Alternative C – Stevens Road Site

Alternative C – Stevens Road Site has a slight potential to impact the Ojibwe sacred site on Mt. Rose. Should this alternative be selected, additional coordination with the Band would need to determine if the sacred site would be impacted by the proposed project site and the magnitude of the impact.

Cumulative Impacts

Alternative C – Stevens Road Site would greatly expand human activity in a mostly undisturbed area near an Ojibwe sacred site on Mt. Rose and has the potential to lead to additional development in the area, which increases the likelihood of impacting the site in the future.

Conclusion

Construction of Alternative C – Stevens Road Site has the potential to result in a long-term minor adverse impact to the Ojibwe sacred site on Mt. Rose. If the site is selected, further consultation with the Band is needed to determine the nature of any impact on the Ojibwe sacred site.

3.8 INDIAN TRUST RESOURCES

3.8.1 Regulations and Policies

DOI Secretarial Order 3175 and Environmental Compliance Memorandum 95-2 requires the NPS to address impacts of its proposed actions on Indian Trust Resources.

3.8.2 Affected Environment

As stated in the Grand Portage National Monument Final General Management Plan Environmental Impact Statement (NPS, 2003):

> Grand Portage National Monument is within the Grand Portage Reservation, and some of its lands were donated by the Grand Portage Band of Minnesota Chippewa. Section 2 of the establishing legislation notes that the lands are to be held "…in trust by the United States of America for the said tribe or band…." Grand Portage National Monument is public property managed by the National Park Service, and the Grand Portage Band did not retain any property rights that would constitute a legal trust responsibility. That is not to say that the Band does not have certain other rights to the land that are spelled out in the legislation establishing the national monument. Those rights will be honored.

Alternative B – Store Road Site and Alternative C – Stevens Road Site would require the use of Indian Trust Lands as described below.

3.8.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would maintain the current use of Indian Trust Lands for NPS seasonal staff housing, but would not impact any additional Indian Trust Lands. With the continued use of Indian Trust Lands located along the lake shore, Alternative A – No-Action would inhibit development of this land for Band purposes.

Cumulative Impacts

The continued use of the lake front Indian Trust Land for NPS seasonal housing would prevent the Band from developing the property for Band use. This land could be developed by the Band to generate revenue for the Band. The continued use of the land for NPS seasonal housing would have a minor adverse impact on such development.

Conclusion

Continued use of the current NPS seasonal housing site, which is located on Indian Trust Land, would result in a minor adverse long term impact, because this land could be developed by the Band to generate revenue.

3.8.4 Impacts of Alternative B – Store Road Site

The Store Road Site is located entirely on Indian Trust Lands. The site currently is used for equipment and materials storage by the Band. The development of this site for the maintenance facility and housing unit would result in the leasing of approximately 2 acres of Indian Trust Land to the NPS. However, the maintenance facility would have a document storage area for the RTC and the maintenance resources would be available for official Band use. With the construction of this alternative, the more valuable lake front Indian Trust Land that is currently used for NPS seasonal housing would be available for Band use and the functionality of the Store Road Site would be improved. With this alternative, the NPS and Band sites for maintenance and equipment and materials storage would be consolidated into one site.

Cumulative Impacts

This alternative would contribute to the cumulative impact on Indian Trust lands through a slight increase in the amount of land leased to the NPS, but would also make more valuable lake front property available once again for Band use.

Conclusion

Alternative B – Store Road Site would have a long-term, minor impact on Indian Trust Lands. Depending on the future use of the current NPS seasonal housing on Band land, this impact could be beneficial. In addition, since the new maintenance facility would have a shared use for the NPS and the Band, the loss of land available for Band use is limited to the proportion of the parcel allocated to NPS seasonal housing.

3.8.5 Impacts of Alternative C – Stevens Road Site

The Stevens Road Site is located on NPS lands, but would require the construction of an access road across Indian Trust Lands. The area needed for the access road would be approximately 2 acres, essentially the same amount of land required for the site. While the maintenance facility would have a document storage area for the RTC and the maintenance resources would be available for official Band use, the NPS and Band sites for maintenance and equipment and materials storage may not be consolidated into one site. With the construction of this alternative, the more valuable lake front Indian Trust Land that is currently used for NPS seasonal housing would be available for Band use.

Cumulative Impacts

Like Alternative B – Store Road Site, Alternative C – Stevens Road Site would result in an increase of Indian Trust Lands that would not be available for Band use. With Alternative C – Stevens Road Site, the 2 acres of Indian Trust Lands would be converted from a forest area to a road. However, the Band will be able to use the proposed maintenance facility on NPS lands.

Conclusion

Alternative C – Stevens Road Site would have a long-term, minor adverse effect on Indian Trust Lands by converting 2 acres to a road to access the new maintenance facility and NPS seasonal housing unit on NPS lands.

3.9 WILDLIFE AND HABITATS

3.9.1 Regulations and Policies

Impacts on wildlife and habitats are evaluated in accordance with NPS *Management Policies 2001* (NPS, December 2000).

3.9.2 Affected Environment

The project area is located in an area of transitional habitats from northern hardwood forest to the south, grasslands to the west, and boreal forest to the north (NPS 2003). The two major forest types in the area are aspen-birch which is dominated by quaking aspen (*Populus tremuloides*) and paper birch (*Betula papyrifera*); and spruce-fir which is dominated by white spruce (*Picea glauca*) and balsam fir (*Abies balsamea*) (NPS 2003). Other native vegetative species abundant in the area include bunchberry dogwood (*Cornus Canadensis*), beaked hazelnut (*Corylus cornuta* var. *cornuta*), bluebead (*Clintonia borealis*), Canada mayflower (*Mainathemum canadense*), and twistedstalk (*Streptopus roseus* var. *longipes*). Wild caraway (*carnum carvi*) is the most abundant non-native species in the area. Also of note is a relatively rare stand of jack pine (*Pinus banksiana*) on Mount Rose near Alternative C – Stevens Road Site (NPS. June 4, 2009). While Lake Superior is east of the project area, no aquatic resources are within the project area for either of the build alternatives.

A 1995 study of wildlife present within the Grand Portage National Monument identified 102 bird, 27 mammal, 8 amphibian, and one reptile species (Graetz et al. 1995). Abundant wildlife species include the species listed in Table 3-3.

Table 3-3
Abundant Wildlife Species

Common Name	Scientific Name
Birds	
Herring Gull	*Larus argentatus*
Ruffed Grouse	*Bonasa umbellus*
White-throated Sparrow	*Zonotrichia albicollis*
Yellow-rumped Warbler	*Dendroica coronata*
Chestnut-sided Warbler	*Dendroica pensylvanica*
Black-throated Green Warbler	*Dendroica virens*
Northern Parula	*Parula americana*
Ovenbird	*Seiurus aurocapillus*
Red-breasted Nuthatch	*Sitta canadensis*
Winter Wren	*Troglodytes troglodytes*
Veery	*Catharus fuscescens*
Swainson's Thrush	*Catharus ustulatus*
Red-eyed Vireo	*Vireo olivaceus*
Downy Woodpecker	*Picoides pubescens*
Mammals	
Little Brown Bat, Little Brown Myotis	*Myotis lucifugus*
Southern Red-backed Vole	*Clethrionomys gapperi*
Deer Mouse	*Peromyscus maniculatus*

Common Name	Scientific Name
Red Squirrel	*Tamiasciurus hudsonicus*
Cinereus Shrew, Common Shrew, Masked Shrew	*Sorex cinereus*
Amphibians	
American Toad	*Bufo americanus*
Wood Frog	*Rana sylvatica*

3.9.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not include any new land disturbance or change in typical operations and thus would not change wildlife populations, habitats, or unique ecosystems. Therefore, Alternative A – No-Action would have no impact on wildlife populations and their habitats.

Cumulative Impacts

Although other past, present, and reasonably foreseeable future projects may affect wildlife and habitats, Alternative A – No-Action would not contribute to the effects of the other projects. Consequently, there would be no cumulative impact on wildlife and habitats under Alternative A – No-Action.

Conclusion

Alternative A – No-Action would have no impact on wildlife populations and their habitats and would not result in an impairment of resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. Wildlife has adapted to area operations, and adverse impacts resulting from current management are minor and include occasional road mortality of wildlife, including birds. There would be no cumulative impact on wildlife and habitats under Alternative A – No-Action.

3.9.4 Impacts of Alternative B – Store Road Site

Alternative B – Store Road Site would use a previously disturbed site that is currently used for some maintenance and storage activities. At this time, no tree removal is anticipated during site grading activities. The area would be surveyed for migratory birds prior to construction. If suitable habitat for migratory birds or other species were found, trees and ground vegetation would be removed during a designated period. The area of tree and ground vegetation removal would have a negligible effect on the relative abundance, distribution, and quality of the wildlife habitat available in the area. The impact of the tree and ground vegetation removal would be long term, negligible, adverse, and local.

Construction activities to implement Alternative B – Store Road Site could produce short-term, minor, adverse, local impacts such as noise. Following construction, the impacts on wildlife and habitats would be measurable or perceptible but localized within a small area.

There is adequate suitable habitat available for wildlife to migrate to during and after construction. Further, disturbed undeveloped areas would be re-vegetated with grasses compatible with native species. During final design, context-sensitive design would be

used to attempt to minimize the removal of trees and effects on natural habitat. Impacts would be minimized by the implementation of best management practices and mitigation measures, described in Section 2.5, Resource Protection Measures.

In all, Alternative B – Store Road Site would have negligible adverse short-term and long-term impacts on wildlife and habitats in the Project Area.

Cumulative Impacts

Although other past, present, and reasonably foreseeable future projects may affect wildlife and habitats, Alternative B – Store Road Site would have a negligible contribution to the effects of the other projects. Consequently, there would be a negligible cumulative impact on wildlife and habitats under Alternative B – Store Road Site.

Conclusion

Alternative B – Store Road Site would have negligible adverse impacts on wildlife and habitats in the Project Area but would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. Disturbance of habitat within the Project Area would occur as a result of construction activities. Cumulative impacts would also be negligible.

3.9.5 Impacts of Alternative C – Stevens Road Site

Alternative C – Stevens Road Site would use a previously undisturbed site in a natural condition. The construction of this site would require clearing of trees in the 2 acre development site as well as along the proposed access road, also approximately 2 acres.

The area would be surveyed for migratory birds prior to construction. If suitable habitat for migratory birds or other species were found, trees and ground vegetation would be removed during a designated period. The area of tree and ground vegetation removal would have a minor effect on the relative abundance, distribution, and quality of the habitat available in the area. The impact of the tree and ground vegetation removal would be long term, minor, adverse, and local.

Construction activities for Alternative C – Stevens Road Site could produce short-term, minor, adverse, local impacts, such as noise. Following construction, the impacts on wildlife and habitats would be measurable or perceptible but localized within a small area.

There is adequate suitable habitat available for wildlife to migrate to during and after construction. Further, disturbed undeveloped areas would be re-vegetated with grasses compatible with native species. During final design, context-sensitive design would be used to attempt to minimize the removal of trees and effects on natural habitat. Impacts would be minimized by the implementation of best management practices and mitigation measures, described in Section 2.5, Resource Protection Measures.

In all, Alternative C – Stevens Road Site would have a minor adverse short-term and long-term impacts on wildlife and habitats in the Project Area.

Cumulative Impacts

Although other past, present, and reasonably foreseeable future projects may affect wildlife and habitats, Alternative B – Store Road Site would have a minor contribution to the effects of the other projects. Consequently, there would be a minor cumulative impact on wildlife and habitats under Alternative C – Stevens Road Site.

Conclusion

Alternative C – Stevens Road Site would have minor adverse impacts on wildlife and habitats in the Project Area but would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. Disturbance of habitat within the Project Area would occur as a result of construction activities. Cumulative impacts would also be minor.

3.10 ENDANGERED, THREATENED, OR PROTECTED SPECIES AND CRITICAL HABITATS

3.10.1 Regulations and Policies

Impacts on endangered, threatened, or protected species and critical habitats are evaluated in accordance with the Endangered Species Act of 1973 (16 USC 1531 et seq.) and NPS *Management Policies 2001* (NPS, December 2000).

3.10.2 Affected Environment

The Endangered Species Act of 1973 protects species listed as endangered or threatened on the federal list of endangered and threatened wildlife and plants. Species listed as endangered are in danger of extinction as a consequence of development without adequate concern and conservation. Species listed as threatened are likely to become an endangered species in the foreseeable future. The Project may affect a listed species if it would modify habitat, would preclude or impede development of habitat, would likely disturb feeding or breeding activities, or would harm or kill an individual of that species. Protected species, also known as species of special concern, are not endangered or threatened but require both control and protection. USFWS is the agency that maintains the federal list of endangered and threatened wildlife and plants.

Regardless of whether a species is federally listed, a species may be listed by the State of Minnesota as endangered, threatened, or a species of special concern. The Minnesota Department of Natural Resources (MnDNR) is the agency that maintains the state list of endangered, threatened, and protected species.

Table 3-4 lists the endangered, threatened, and protected species with the potential to occur or those that have historically occurred in the Project Area.

Critical habitats are the specific areas occupied by a species on which physical or biological features that are essential to the conservation of the species are found and which may require special management considerations or protection.

Table 3-4
Endangered, Threatened, and Protected Species with the Potential to Occur or That Have Historically Occurred in the Project Area

Common Name	Scientific Name	Status[1]	Present in the Project Area		
			Alt. A	Alt. B	Alt. C
Birds					
Bald Eagle[2]	*Haliaeetus leucocephalus*	SC	No	No	ND[3]
Mammals					
Canada Lynx[4]	*Lynx canadensis*	FT	No	No	ND
Northern Myotis	*Myotis septentrionalis*	SC	No	No	ND
Gray Wolf	*Canis lupus*	FT[5]	No	No	ND
Plants					
Common Moonwort	*Botrychium lunaria*	ST	No	No	ND
Least Moonwart	*Botrychium simplex*	SC	No	No	ND
Black Hawthorn	*Crataegus douglasii*	ST	No	No	ND
Rocky Mountain Woodsia	*Woodsia scopulina*	ST	No	No	ND
Smooth Woodsia	*Woodsia glabella*	ST	No	No	ND
Creeping Juniper	*Juniperus horizontalis*	SC	No	No	ND
Wild Chives	*Allium schoenoprasum var. sibiricum*	ST	No	No	ND
Blunt Fruited Sweet Cicely	*Osmorhiza depauperata*	SC	No	No	ND
Torrey's Manna Grass	*Torreyochloa pallida*	SC	No	No	ND
Slender Hairgrass	*Deschampsia flexuosa*	SC	No	No	ND
Rock Whitlow-grass	*Draba arabisans*	SC	No	No	ND
Satiny Willow	*Salix pellita*	SC	No	No	ND

Source: NPS, June 18, 2009.

Notes:

1 *FT = federally threatened; ST = state threatened; SC= state species of special concern.*

2 *Protected species of migratory birds are not specified because many species exist in the Project Area.*

3 *ND = Presence within the Project Area has not been determined.*

4 *Critical habitat has been established in Minnesota for the Canada Lynx but the Project is not located within the designated critical habitat area.*

5 *The gray wolf was delisted by the USFWS on April 2, 2009; however in response to a lawsuit, it was temporarily relisted as threatened on June 30, 2009, pending public comment.*

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is a large raptor with a distinctive white head and is the national bird of the United States. The bald eagle was removed from the federal threatened and endangered species list on June 28, 2007, but remains protected by the Bald and Golden Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918 (USFWS 2008, 16 U.S.C. 668-668c, and 16 USC 703-712). In addition, the bald eagle remains a Minnesota species of special concern (MnDNR 2009a). The Bald and Golden Eagle Protection Act prohibits the take, transport, sale, barter, trade, import and export, and possession of eagles, making it illegal for anyone to collect eagles and eagle parts, nests, or eggs without a permit. The Migratory Bird Treaty Act protects all migratory birds including their eggs, nests and feathers.

Migratory Birds

Migratory birds are abundant in the area and are protected under the Migratory Bird Treaty Act. The forests in the area are important for bird habitat.

Canada Lynx

The Canada lynx (*Lynx canadensis*) is a cat of medium size with furred paws, tufts of fir on their ears, and a black tail tip, and was listed as a federal threatened species on March 24, 2000. The Canada lynx occupies southern boreal forest, including subalpine coniferous forest to the west, and mixed coniferous/deciduous forest to the east (65 FR 10652). The latest revision to the critical habitat designated for the Canada lynx was published in the Federal Register on February 25, 2009. While there is critical habitat for the Canada lynx designated in Minnesota, the project area does not fall within this designated critical habitat (USFWS June 2009).

Northern Myotis

Northern myotis (*Myotis septentrionalis*) is a mid-sized bat that was listed as a Minnesota species of special concern in 1984 and is also known as the northern long-eared myotis. Northern myotis winter in caves and sand and deep iron mines, but spend summers in forested areas near wetlands in trees with loose bark during the day and in caves, mines and quarry tunnels at night (MnDNR 2009b).

Gray Wolf

Gray wolf (*Canis lupus*) was listed as a federally endangered species throughout the lower 48 states in 1974 (39 FR 40877). In 1978, the gray wolf was reclassified as a threatened species in Minnesota and critical habitat was designated for the gray wolf in Minnesota and Michigan, including the Project area (43 FR 9607). The gray wolf was delisted by the USFWS on April 2, 2009; however, in response to a lawsuit, it was temporarily relisted as threatened on June 29, 2009, pending public comment (USFWS April 29, 2009). Gray wolves are known for their ability to adapt to climate extremes and are considered second only to humans in this ability (USFWS March 2009). Their territories range in size from 50 square miles to more than 1,000 square miles based on prey availability and movements (USFWS March 2009).

Common Moonwort

Common moonwort (*Botrychium lunaria*) is the most common of the moonworts, but is still extremely rare in Minnesota and was listed as a state threatened species in 1996 (MnDNR 2009c). Common moonwort is only 1 to 7 inches tall with a single leaf and a sterile segment and a fertile segment (MnDNR 2009c). It is found in gravelly banks, rocky ledges, and talus, but has also been found in sparsely vegetated grass or shrub habitats and fire-dependent forests among mosses and lichens (MnDNR 2009c).

Least Moonwort

Least moonwort (*Botrychium simplex*) is found in northeastern Minnesota and in the majority of the northern United States and Canada (MnDNR 2009d). This perennial species rarely grows larger than 8 centimeters in height and is often found in dry hilly pastures but is also known to occur in meadows, woods, and barrens (Anderson 2006). In Minnesota, least moonwort has been found in areas with both open and closed canopies and often associated with black ash (*Fraxinus nigra*), cedar (*huja occidentalis*), jack pine (*Pinus banksiana*), and reed canarygrass (*Phalaris arundinacea*) (Anderson 2006).

Black Hawthorn

Black hawthorn (*Crataegus douglasii*) became a state listed threatened species in 1996 and is only known to occur in Minnesota in Cook and Lake Counties within 5 miles of the Lake Superior shore (MnDNR 2009e). It has been found on "rocky or gravelly stream banks, lakeshores, shrub thickets, forest margins, and rock outcrops" (MnDNR 2009e).

Rocky Mountain Woodsia

Rocky mountain woodsia (*Woodsia scopulina*), a fern, became a state listed threatened species in 1984 and is only found in Cook County "primarily limited to the Rove Slate Formation at the eastern end of the Border lakes region" on north-facing cliffs (MnDNR 2009f). Rocky Mountain woodsia is difficult to distinguish from other woodsias but an identifying characteristic is minutely stalked glands and white hairs on the underside of the leaf blade (MnDNR 2009f).

Smooth Woodsia

Smooth woodsia (*Woodsia glabella*), a fern, became a state listed threatened species in 1984 and is extremely rare, grows in crevices in moist, north-facing cliffs, and is found only in Cook and Lake counties (MnDNR 2009g). Species often present in this habitat include northern white cedar (*Thuja occidentalis*), heart-leaved birch (*Betula cordifolia*), fragile fern (*Cystopteris fragilis*), ivory sedge (*Carex eburnea*), encrusted saxifrage (*Saxifraga paniculata*), harebell (*Campanula rotundifolia*), and mosses" (MnDNR 2009g). The first discovery of smooth woodsia in 1929 was in the cliffs near Grand Portage (MnDNR 2009g). Reproductive structures are used to identify smooth woodsia and identification is difficult when the reproductive structures are not present (MnDNR 2009g).

Creeping Juniper

Creeping juniper (*Juniperus horizontalis*) is found in various scattered locations throughout Minnesota, except the southwest corner of the state (MnDNR 2009h), and is found throughout much of the northern United States and Canada (Gucker 2006). Creeping juniper is a ground shrub that grows horizontally, forms mats, and normally does not exceed 10 inches in height (Gucker 2006). It prefers areas that are well drained and that are often sandy or rocky, including open hillsides, eroded areas, cliffs, and beaches (Gucker 2006).

Wild Chives

Wild chives (*Allium schoenoprasum var. sibiricum*) have been found in seven locations in Minnesota, most recently in three populations in Cook County and one in Jake Cooke State Park in Carlton County, and was listed as a species of special concern in 1984 (MnDNR 2009i). Northern Minnesota is the on the southern edge of this perennial plant's range, where it is found on rocky ridges, ledges, and shores (MnDNR 2009i). Plants grow from slender bulbs and reproduce only by seed and are primarily threatened by damage to sensitive shoreline habitat (MnDNR 2009i).

Blunt Fruited Sweet Cicely

Blunt fruited sweet cicely (*Osmorhiza depauperata*) is found only in Cook County in Minnesota (MnDNR 2009j). It is a delicate plant that is easily overlooked and can grow singly or in large groups (Southwest Colorado Wildflowers undated). Blunt fruited sweet cicely has tiny sprays of tiny white flowers, and the plant gives off a licorice aroma (Southwest Colorado Wildflowers undated).

Torrey's Manna Grass

Torrey's manna grass (*Torreyochloa pallida*) is found in northeast Minnesota (MnDNR 2009k). This perennial grass species is found "in swamps, marshes, bogs, and the margins of lakes and streams" (Davis undated).

Slender Hairgrass

Slender hairgrass (*Deschampsia flexuosa*) is a state species of special concern that is found in Cook and St. Louis counties (MnDNR 2009l). This grass is found near the Great Lakes in pine forests and in barren areas (Wisconsin Department of Natural Resources 2007a).

Rock Whitlow-Grass

Rock Whitlow-grass (*Draba arabisans*) is a state species of special concern that is found in Cook and Lake counties in northern Minnesota and Olmsted and Fillmore counties in southeastern Minnesota (MnDNR 2009m). This species is often associated with white cedar and is found on cliffs that may be shaded or exposed to sunlight (Wisconsin Department of Natural Resources 2007b).

Satiny Willow

Satiny willow (*Salix pellita*) is a state species of special concern that is found in Cook, Lake, and St. Louis counties (MnDNR 2009n). It is a wetland species and is similar in appearance to sandbar willow (U.S. Department of Agriculture 2009; Petrides and Petrides 1998).

3.10.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not include any new land disturbance or change in typical operations and thus would not affect endangered, threatened, or protected species or their critical habitats in the Project Area. Therefore, Alternative A – No-Action would have no effect or no impact on endangered, threatened, or protected species and critical habitats.

Cumulative Impacts

Although other past, present, and reasonably foreseeable future projects may affect endangered, threatened, or protected species and critical habitats, Alternative A – No-Action would not contribute to the effects of the other projects. Consequently, there would be no cumulative impacts on endangered, threatened, or protected species and critical habitats under Alternative A – No-Action.

Conclusion

Alternative A – No-Action would have no effect or impact on endangered, threatened, or protected species and critical habitats and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. There would be no cumulative impact on endangered, threatened, or protected species and critical habitats under Alternative A – No-Action.

3.10.4 Impacts of Alternative B – Store Road Site

The Store Road Site has already been graded and, through its current use and continued disturbance for equipment and materials storage, does not contain a naturally occurring vegetative community, but rather is dominated by opportunistic species, see Section 3.11.2. The habitat requirements for the above listed species are not present. There is no designated critical habitat for the Canada lynx in the vicinity of the Store Road Site, and the Canada lynx is not likely to use the site as it is subject to regular human disturbance today. While the Store Road Site is located within the critical habitat designated for the gray wolf, the site is already disturbed. The use of the Store Road Site by gray wolves would be transitory, if any, due to this disturbance. The conditions at the site preclude the presence of any of the above listed plant species with the exception of satiny willow which has an extremely low probability of being present in the subtle low areas that were created with the uneven grading of the site (NPS June 18, 2009).

Should this site be selected, a plant species survey should be conducted to confirm that none of these species are present. Alternative B – Store Road Site is not expected to have any impact or Endangered Species Act effect on threatened, endangered, or protected species and critical habitats.

Cumulative Impacts

Although other past, present, and reasonably foreseeable future projects may affect endangered, threatened, or protected species and critical habitats, Alternative B – Store Road Site would not contribute to the effects of the other projects. Consequently, there would be no cumulative impacts on endangered, threatened, or protected species and critical habitats under Alternative B – Store Road Site.

Conclusion

Alternative B – Store Road Site would have no effect or impact on endangered, threatened, or protected species and critical habitats and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. There would be no cumulative impact on endangered, threatened, or protected species and critical habitats under Alternative B – Store Road

Site. However, should this alternative be selected a plant species survey should be conducted to verify that these species have not moved into the area during the intervening time.

3.10.5 Impacts of Alternative C – Stevens Road Site

The Stevens Road Site is a natural forested community. Construction for this site and its access road would require the removal of the forest community for construction of the maintenance facility and housing unit. While the conditions at the site remain in a natural state, they do not represent primary habitat areas for any of the species listed above. While there is no designated critical habitat for the Canada lynx in the vicinity of the Stevens Road Site, there remains a low probability of Canada lynx in the area. Although the Stevens Road Site is within the critical habitat for the gray wolf, the disturbance of only two acres is expected to have a minor impact (per NPS criteria), and may affect but is not likely to adversely affect the gray wolf and its critical habitat. Construction of Alternative C – Stevens Road Site would have a minor effect (per NPS criteria) on the Canada lynx through the introduction of human activity and vegetation clearing in a previously natural area; no Endangered Species Act effect on the Canada lynx would occur. Due to habitat conditions present, there is a low probability that any of the other species listed above would be present on the site (NPS June 18, 2009).

Should this site be selected, a plant species survey should be conducted to confirm t hat none of these species are present and that the trees do not meet the summer habitat requirements of the northern myotis. The alternative is expected to have a minor long-term effect on threatened, endangered, or protected species and critical habitats.

Cumulative Impacts

Alternative C – Stevens Road Site would have a minor contribution to the effects of the other projects through the conversion of approximately 4 acres of relatively natural vegetation without human activity to a developed site with regular human activity. Consequently, there would be a minor contribution to cumulative impacts on endangered, threatened, or protected species and critical habitats under Alternative C – Stevens Road Site.

Conclusion

Alternative C – Stevens Road Site would have a minor impact (may affect but not likely to adversely affect the gray wolf and its critical habitat; no effects on other endangered, threatened, or protected species and critical habitats) and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. There would be a minor cumulative impact on endangered, threatened, or protected species and critical habitats with construction of Alternative C – Stevens Road Site through the clearing of native vegetation and introduction of human disturbance. Should this site be selected, a plant species survey should be conducted to confirm that none of these species are present and that the trees do not meet the summer habitat requirements of the northern myotis.

3.11 VEGETATION

3.11.1 Regulations and Policies

Impacts on vegetation are evaluated in accordance with NPS *Management Policies 2001* (NPS, December 2000).

3.11.2 Affected Environment

As stated above in Section 3.9.2, the project area is located in an area of transitional habitats from northern hardwood forest to the south, grasslands to the west, and boreal forest to the north (NPS 2003). Forest types and vegetation in the area are described in Section 3.9.2 and are not repeated here.

3.11.3 Impacts of Alternative A – No-Action

Under Alternative A – No-Action, no construction would occur in the Project Area. Use of the current sites for the maintenance facility, storage yard, and seasonal housing would continue, and would not be expected to change the current vegetative diversity of the area. Therefore, Alternative A – No-Action would have no impact on vegetation.

Cumulative Impacts

No other identified projects within the area would affect vegetation. Therefore, there would be no cumulative impact on vegetation under Alternative A – No-Action.

Conclusion

Alternative A – No-Action would have no impact on vegetation and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. No cumulative impacts on vegetation would occur.

3.11.4 Impacts of Alternative B – Store Road Site

On June 4, 2009, an informal, non-scientific survey was conducted of the vegetation present at the Store Road Site for comparison to the natural vegetation community described above. Table 3-5, Species Present at the Store Road Site, lists the species identified.

Based on a review of the cleared area on site and the site layout plan, no additional native tree and shrub species in the Project Area would need to be cleared, and the area that is to be developed would be reseeded or replanted with native species. Alternative B – Store Road Site would result in further development of this site, but as Table 3-5 demonstrates, the vegetation community present is comprised of opportunistic species that are not representative of natural vegetation communities in the area. However, following the construction of the new facilities, the remaining area of the site would be re-seeded with native species and additional tree and shrub species would be planted to screen the buildings from Store Road and the maintenance facility from the housing unit. This revegetation would result in a minor beneficial long-term impact on vegetation.

Table 3-5
Species Present at the Store Road Site

Species		Species	
Common Name	Scientific Name	Common Name	Scientific Name
Smooth brome	*Bromus inermus*	Dandelion	*Taraxacum sp.*
Scouring rush	*Equisetum hyemale*	bedstraw	*Gallium spp.*
Meadow horsetail	*Equisetum arvense*	Speckled alder	*Alnus incana subsp. Rugosa*
Sedge	*Carex spp.*	Willow	*Salix spp.*
Goldenrod	*Solidago spp.*	Rush	*Juncus spp.*
Reed canarygrass	*Phalaris arundinacea*	Balsam poplar	*Populus balsamifera*
Tansy ragwort	*Senecio jacobaea*	Red osier dogwood	*Cornus sericea*
Serviceberry	*Amelanchier arborea*	Bigleaf aster	*Eurybia macrophylla*
Pin cherry	*Prunus pensylvanica*	Wild strawberry	*Fragaria spp.*
American vetch	*Vicia americana*	Balsam fir	*Abies balsamea*
White spruce	*Picea glauca*	Raspberry	*Rubus spp.*

Cumulative Impacts

No other identified projects within the area would affect vegetation. Therefore, the cumulative impact on vegetation would be minor and beneficial.

Conclusion

Alternative B – Store Road Site would have minor beneficial long-term impacts on vegetation and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. Based on a review of the cleared area on site and the site layout plan, no additional land in the Project Area would need to be cleared, and the area that is to be developed would be reseeded or replanted with native species. The cumulative impact on vegetation would be minor and beneficial.

3.11.5 Impacts of Alternative C – Stevens Road Site

The vegetation present at the Stevens Road Site remains in a relatively natural forest community for the area and is comprised of: quaking aspen (*Populus tremuloides*), white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), and paper birch (*Betula papyrifera*). However, this site is in close proximity to a known jack pine (*Pinus banksiana*) stand. Jack pine forest and woodland communities are rare and occur only in a few locations in eastern Cook County from just west of Hovland, northeast to the Canadian border (NPS, June 4, 2009). The construction of Alternative C – Stevens Road Site has the potential to impact the community composition and structure of the jack pine stand as it is particularly vulnerable to invasion by non-native species (NPS, June 4, 2009). Development near this stand is likely to have an adverse impact on the jack pine stand (NPS, June 4, 2009). Due to the proximity of the jack pine stand, Alternative C – Stevens Road Site would have a minor to moderate long-term adverse impact on vegetation.

Cumulative Impacts

No other identified projects within the area would affect vegetation. Therefore, the cumulative impact on vegetation would be minor to moderate and adverse.

Conclusion

Due to the presence of natural vegetation and the rare jack pine stand in the vicinity of Alternative C – Stevens Road Site, this alternative would result in a minor to moderate long-term adverse impact on vegetation.

3.12 AIR QUALITY

3.12.1 Regulations and Policies

Impacts on air quality are evaluated in accordance with the Clean Air Act of 1970, as amended (42 USC 7401 et seq.) and NPS *Management Policies 2006* (NPS August 2006).

3.12.2 Affected Environment

As required by the Clean Air Act, EPA has established National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. Primary standards set limits to protect public health, while secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings (EPA, July 29, 2005). In accordance with the Clean Air Act, the Monument is designated a Class II area. Class II areas are allowed a moderate amount of degradation under the Clean Air Act. Under the Clean Air Act, NPS has an affirmative responsibility to protect Monument air-quality-related values, including visitor health, visibility, cultural resources, plants, animals, soils, and water quality, from adverse air pollution impacts. Any impacts on air quality, therefore, are considered potentially detrimental. Consideration must also be given to protection of air-quality-related values in the surrounding areas. The closest Class I area, where air pollutants are more restrictive to protect and improve visibility, is Isle Royale National Park, within Lake Superior, about 20 miles to the east of the Monument (EPA May 26, 2009). The Boundary Waters Canoe Area Wilderness, the next closest Class I area, is located approximately 60 miles west of the Monument.

Cook County is in attainment for all criteria pollutants (EPA June 11, 2009).

3.12.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would make no changes to the existing effects of activities on air quality in the Monument. There would be no new traffic patterns, construction, use of heavy equipment, or disturbance associated with this alternative. The current operation of motor vehicles and maintenance equipment may cause temporary, local air quality degradation within the Project Area. Therefore, Alternative A – No-Action would continue to have a negligible adverse impact on air quality.

Cumulative Impacts

To evaluate cumulative impacts on air quality, the impacts of the Project were considered in conjunction with the impacts of past, present, and reasonably foreseeable future projects in the Monument. The only foreseeable future project (other than the proposed project that is the subject of this EA) within the Monument is the possible redevelopment of the existing maintenance and housing properties. If Alternative A – No-Action is selected, redevelopment of lake front properties currently occupied by NPS seasonal housing and the outdoor storage yard would not occur. Other reasonably foreseeable actions in the vicinity of the Monument (see Section 3.1.2) would have negligible to minor impacts to air quality. Alternative A – No-Action would not contribute to any of these impacts. Consequently, air quality would be unchanged. Therefore, the cumulative impacts on air quality would be negligible to minor**.**

Conclusion

Alternative A – No-Action would continue to have a negligible adverse impact. Cumulative actions would also have a negligible to minor impact on air quality.

3.12.4 Impacts of Alternative B – Store Road Site

Under implementation of Alternative B – Store Road Site, impacts on air quality would be related to construction and limited to short-term increases of fugitive dust/particulates and mobile-source emissions, as described below.

The primary potential construction-related impact on air quality would be fugitive dust, a form of particulate matter, which would be generated by construction activities, the movement of construction equipment and other vehicles (including movement over paved and unpaved surfaces, dirt tracked onto paved surfaces from unpaved surfaces at access points, and material blown from uncovered haul trucks), and disturbed ground cover as soil is exposed to wind and traffic. Amounts of fugitive dust generated would vary depending on the construction location, extent of activity, silt content, soil moisture, and wind speed. While construction work would generate fugitive dust in the Project Area, these particulates may affect nearby areas as well. However, the contribution of the Project to the total suspended particulates in the surrounding area would be confined to the construction period.

Blowing dust generated by construction activities can be minimized in several ways. Water can be applied to unpaved road surfaces, but the effectiveness of this depends on the frequency of application. These measures would be employed as needed during construction of the proposed facilities.

In addition to fugitive dust/particulates, mobile-source emissions, which are generated by construction vehicles and equipment and pollute the air through combustion and fuel evaporation, would also be generated during construction. Such pollutants include particulate matter, carbon monoxide, hydrocarbons, sulfur oxides, and nitrogen oxides. However, ambient concentrations of these pollutants would not be increased significantly. Construction-related impacts of Alternative B – Store Road Site on air quality would be short-term, minor, adverse, and local.

The maintenance facility and seasonal housing would be heated. If the heat source is electric, no air emissions would occur, but if propane boilers are used, they would constitute a stationary source of air emissions. Long-term impacts to air quality from Alternative B – Store Road Site would be negligible. Air quality in Class I areas in the region would not be substantially impacted due to distance from the source (20 miles or more), amount, and dispersion of pollutants.

Cumulative Impacts

Cumulative impacts would be associated with the potential redevelopment of the existing maintenance and housing properties which are located on prime lake front real estate. If redevelopment of the aforementioned areas would occur, demolition activities would increase the concentration of fugitive dust/particles in the vicinity of the project; additionally, mobile-source emissions generated by construction vehicles and equipment would increase the concentration of pollutants in the air. The demolition and construction impacts on air quality would be short-term, minor, adverse, and local. Other reasonably foreseeable actions in the vicinity would generate minor amounts of pollutants. The overall cumulative short-term adverse impact on air quality would be minor. Long-term impacts to air quality from Alternative B – Store Road Site would be negligible.

Conclusion

Alternative B – Store Road Site would have short-term, minor adverse impacts on air quality. Cumulative impacts on air quality would be short-term, minor, adverse, and local.

3.12.5 Impacts of Alternative C – Stevens Road Site

Alternative C – Stevens Road Site would have air quality impacts similar to those mentioned for Alternative B – Store Road Site; impacts on air quality would be related to construction and limited to short-term increases of fugitive dust/particulates and mobile-source emissions. The quantity of pollutants generated and the duration of pollutant generation would be somewhat greater than Alternative B – Store Road Site because more extensive site preparation (clearing and grubbing of vegetation, grading, and construction of an access road) would be needed. Impacts to air quality are anticipated to be short-term, minor, and local.

The maintenance facility and seasonal housing would be heated. If the heat source is electric, no air emissions would occur, but if propane boilers are used, they would constitute a stationary source of air emissions. Long-term impacts to air quality from Alternative C – Stevens Road Site would be negligible. Air quality in Class I areas in the region would not be substantially impacted due to distance from the source (20 miles or more), amount, and dispersion of pollutants.

Cumulative Impacts

Cumulative impacts would be similar to those described in Alternative B – Store Road Site. The impacts on air quality would be short-term, minor, adverse, and local. Similar to Alternative B – Store Road Site, other reasonably foreseeable actions in the vicinity would generate minor amounts of pollutants. The overall cumulative short-term adverse

impact on air quality would be minor. Long-term impacts to air quality would be negligible.

Conclusion

Alternative C – Stevens Road Site would have short-term, minor adverse impacts on air quality. Cumulative impacts on air quality would be short-term, minor, adverse, and local.

3.13 SOUNDSCAPE MANAGEMENT

3.13.1 Regulations and Policies

In accordance with NPS *Management Policies 2006* (NPS, August 2006) and NPS *Director's Order 47: Soundscape Preservation and Noise Management* (NPS, December 1, 2000), an important part of the NPS mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-produced sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in national park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-produced sound considered acceptable vary among national park units as well as potentially vary throughout each national park unit, being generally greater in developed areas and less in undeveloped areas.

3.13.2 Affected Environment

The protection of a natural ambient soundscape and/or the opportunity for visitors to experience natural sound environments contributes to visitor enjoyment of trails, but is not an objective of NPS for the Grand Portage National Monument at the existing or proposed maintenance facility or NPS seasonal housing unit. However, the proximity of the proposed sites to trails and visitor facilities need to be considered. The current maintenance facility is located approximately 200 feet east of the Grand Portage Trail.

3.13.3 Impacts of Alternative A – No-Action

Alternative A – No-Action would not change typical operations and thus would not affect the current soundscape conditions in the Project Area. Maintenance operations would continue to have a minor adverse impact on the soundscape along the Grand Portage Trail.

Cumulative Impacts

No other identified projects within the area would affect soundscape management. While not currently planned, any additional development of the marina, Trading Post, or Lodge and Casino, could have an impact on soundscape management. However, Alternative A – No-Action would not contribute to the cumulative impact on soundscape management.

Conclusion

Alternative A – No-Action would have no impact on soundscape management and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. No cumulative impacts on soundscape management would occur.

3.13.4 Impacts of Alternative B – Store Road Site

Construction associated with implementation of the Project, such as the relocation of material from the existing maintenance facility and storage site to the new complex, or the operation of construction equipment, could result in dissonant sounds, but such sounds would be temporary and not out-of-place in such a setting. The long-term operation of the maintenance facility would result in regular disturbance of the natural soundscape through the operation of equipment and vehicle maintenance at the new maintenance facility, but such disturbance is present today because the site is already being used for equipment and materials storage. Alternative B – Store Road Site, would have no long-term impact on soundscape management.

Cumulative Impacts

No other identified projects within the area would affect soundscape management; future unrelated improvements of the casino, trading post, and marina are distant from the site. Therefore, there would be no cumulative impact on soundscape management under Alternative B – Store Road Site.

Conclusion

Alternative B – Store Road Site would have no long-term impact on soundscape management and would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. No cumulative impacts on soundscape management would occur.

3.13.5 Impacts of Alternative C – Stevens Road Site

Construction associated with implementation of the Project, such as the hauling of material or the operation of construction equipment, could result in dissonant sounds, but such sounds would be temporary. The long-term operation of the maintenance facility would result in regular disturbance of the natural soundscape through the operation of equipment and vehicle maintenance at the new maintenance facility. The noise from these activities would be new at the Stevens Road Site, which is currently in a natural condition and is in relatively close proximity to the Mt. Rose Trail. Some of the activities at the maintenance facility may be audible to visitors on the Mt. Rose trail. Therefore, Alternative C – Stevens Road Site would have a minor to moderate long-term adverse impact on soundscape management.

Cumulative Impacts

No other identified projects within the area would affect soundscape management. While not currently planned, any additional development of the marina, Trading Post, or Lodge and Casino, could have an impact on soundscape management. Therefore, the

cumulative impact on soundscape management under Alternative C – Stevens Road Site would be minor to moderate long-term and adverse.

Conclusion

Alternative C – Stevens Road Site would have a minor to moderate long-term adverse impact on soundscape management, but would not result in an impairment of Park resources as defined in Section 3.1.5, Prohibition of Impairment of Park Resources and Values. The cumulative impact on soundscape management under Alternative C – Stevens Road Site would be minor to moderate long-term and adverse.

3.14 WATER QUALITY

3.14.1 Regulations and Policies

Impacts on water resources are evaluated in accordance with the Clean Water Act (33 USC 1251 et seq.), Executive Order 12088, Federal Compliance with Pollution Control Standards (43 FR 47707), and NPS *Management Policies 2006* (NPS August 2006).

3.14.2 Affected Environment

The Monument is within the Baptism-Brule watershed of the Northwestern Lake Superior basin (U.S. Geological Survey August 10, 2007). The Monument's surface water resources include the Grand Portage Bay of Lake Superior, Grand Portage Creek, Poplar Creek, and Snow Creek. Grand Portage Creek flows into Lake Superior at Grand Portage Bay. All three of the abovementioned creeks are perennial and support a variety of fish species. Subsurface water is generally shallow and not abundant due to impervious rock (NPS August 2003). As noted in Section 3.2.2, groundwater has been measured at 28 feet below the ground surface at a U.S. Geological Survey well approximately 1.5 miles from the Store Road Site.

3.14.3 Impacts of Alternative A – No-Action

Under Alternative A – No-Action, the existing operations of the maintenance facility, outdoor storage yard, and housing structure would continue. The impacts on water quality associated with the maintenance facility and outdoor storage yard site, including runoff from the existing area that may contribute oils and organics to Grand Portage Bay, would continue at current rates. Therefore, Alternative A – No-Action would have a negligible adverse impact on water quality.

Cumulative Impacts

Under Alternative A – No-Action, redevelopment of the existing maintenance and housing properties would not occur and water quality conditions at the Monument would be unlikely to change. Other reasonably foreseeable actions, such as improvements to the Grand Portage Lodge and Casino, would generate negligible to minor impacts on water quality.

Conclusion

Alternative A – No-Action would have a negligible adverse impact on the water quality of Grand Portage Creek and Grand Portage Bay. Cumulatively, impacts to water quality would be negligible to minor.

3.14.4 Impacts of Alternative B – Store Road Site

Under Alternative B – Store Road Site, construction of the maintenance facility and housing project has the potential to increase sediment runoff into a small drainageway located on the north edge of the proposed Store Road Site. The proposed construction would disturb about 2 acres of land and NPS would be required to obtain a National Pollutant Discharge Elimination System (NPDES) construction stormwater permit and prepare a Stormwater Pollution Prevention Plan. NPS best management practices would be implemented to minimize short-term surface erosion and sedimentation. Therefore, adverse impacts on water quality would be short-term and minor. A long-term negligible beneficial impact would result from relocating maintenance, storage yard, and housing facilities at a location farther from Grand Portage Creek and Grand Portage Bay.

Cumulative Impacts

Reasonably foreseeable actions include the potential redevelopment of the existing maintenance, housing, and outdoor storage yard properties. This redevelopment would likely involve demolition of the old facilities and construction of new developments. The existing properties are in close proximity to Grand Portage Bay and as a result, best management practices would have to be utilized during construction to minimize run-off and over-land flow into the Bay. A NPDES permit would be required if more than one acre of land would be disturbed. Consequently, future developments would have short-term, minor adverse impacts on water quality. Other reasonably foreseeable actions in the vicinity of the Monument, such as improvements to the Grand Portage Lodge and Casino, would cause short-term, minor adverse impacts to local water quality. Long-term impacts to water quality, generated primarily by runoff from developed sites, would be negligible.

Conclusion

Alternative B – Store Road Site would have short-term, minor, adverse and local impacts on water quality. Run-off control structures installed during the demolition and construction activities will limit the amount of sediment deposition into the unnamed drainage way north of the Store Road Site. Cumulatively, Alternative B – Store Road Site would have a minor short-term adverse affect on water quality. Long-term impacts, both direct and cumulative, would be negligible.

3.14.5 Impacts of Alternative C – Stevens Road Site

The Stevens Road Site is located south of Stevens Road and east of Minn. 61. The nearest body of water is Grand Portage Bay, located south of the proposed Stevens Road Site. The construction of the access road, maintenance, and housing facilities will have the potential to increase run-off of sediment and other debris. Proposed construction at the Stevens Road Site would require a NPDES construction stormwater permit. Best

management practices would be implemented to minimize short-term surface erosion and sedimentation. Short-term adverse impacts to water quality associated with Alternative C – Stevens Road Site would be minor. Long-term impacts to water quality, similar to Alternative B – Store Road Site, would be negligible.

Cumulative Impacts

Cumulative actions would be similar to those described for Alternative B – Store Road Site, resulting in minor short-term adverse impacts on water quality and negligible long-term impacts.

Conclusion

Alternative C – Stevens Road Site would have short-term, minor, adverse and local impacts on water quality. Cumulative short-term adverse impacts would also be minor. Long-term impacts, both direct and cumulative, would be negligible.

CHAPTER 4

CONSULTATION AND COORDINATION

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CONSULTATION AND COORDINATION

As stated in Section 1.4, Project Planning and Scoping, the general public was invited to participate in a public scoping meeting, held at the RTC office in Grand Portage at 6:30 p.m. on June 4, 2009. Grand Portage tribal chairman Norman Deschampe and two members of the public attended the meeting. The meeting was conducted in an open house format. A sign-in sheet was available, along with comment sheets and information on how meeting attendees could provide their input for consideration in the analysis of potential impacts of the proposed action in compliance with NEPA. Display boards stated the purpose of and need for the proposed action as well as the purpose of the meeting. The boards also compared the Store Road and Stevens Road sites; showed aerial views of the two sites; and presented a conceptual drawing of the proposed seasonal housing structure or NPS staff. The Band's intent was for the drawing of the housing structure to show the effect of screening vegetation in order to help emphasize that the development would result in more trees and vegetation in an area whose surface is mostly gravel at this time.

The meeting participants were invited to present relevant comments and questions, along with written statements, in an effort to identify impact topics to address in this EA. Two written comment letters that were submitted by citizens noted approval of the proposed building designs and the preferred alternative site, as follows:

- The proposed designs for the maintenance facility and the seasonal housing appear to be practical and appropriate for the Monument.
- The Project would address a direct need of NPS, and would "improve efficiency and effective operation."
- The Store Road Site would expedite the Project and be more cost effective because of the existing utility service and efficient access to the site.
- Construction of the Project at the Stevens Road site would require disturbance to a naturally wooded area.
- The option of leasing Band property at the Store Road Site would be an opportunity to "integrate programs and develop relationship" between the Band and NPS,

A second, unofficial scoping meeting occurred at noon on Friday, June 12, 2009, at the Elderly Nutrition Center, with more than 20 people in attendance. Mr. Tim Cochrane of the Monument gave a presentation on the Project. Many questions were asked concerning advantages and disadvantages of the alternative sites. Attendees wanted to know why the Store Road Site was preferred over the Stevens Road Site and why the Band should relinquish more of its land base to NPS. Concerns were voiced pertaining to the high costs associated with utilities at the Stevens Road Site and the proximity of the cemetery to that site. Concerns were also expressed about the sacred character of

Mt. Rose. A number of individuals expressed interest in the jobs created by this activity. Several attendees liked the idea of consolidating the maintenance activities in one location and removing equipment and materials from the present maintenance storage yard. Overall, the meeting attendees were receptive to the Store Road Site.

In addition, a public meeting will be held in Grand Portage to obtain public input on the completed EA. The public review period will be 45 days from publication of the EA.

NPS has also initiated early coordination with relevant agencies. This coordination will be completed prior to the start of construction. The agencies involved are the Grand Portage Reservation Tribal Council; Grand Portage Trust Lands and Resources, which will work out the lease detains with the Monument; and the DOI Bureau of Indian Affairs, which will have final approval of the lease agreement.

The planning team participants for the Project are identified in Table 4-1.

Table 4-1
Planning Team Participants

Name	Title	Agency/Company
Normal Deschampe	Tribal Chairman	Grand Portage Band
David Cooper	Chief of Resource Management	Grand Portage National Monument
Melvin Gagnon	Maintenance Supervisor	Grand Portage Band
Tim Cochrane	Superintendant	Grand Portage National Monument
Sharon Walker	Maintenance Administrative Assistant	Grand Portage National Monument
Brandon Seitz	Biological Sciences Technician	Grand Portage National Monument

CHAPTER 5

LIST OF PREPARERS

CHAPTER 5
LIST OF PREPARERS

The preparers of and contributors to this EA are presented in Table 5-1.

Table 5-1
List of Preparers and Contributors

Name	Title	Agency/Company
Preparers		
Mark Wollschlager	Senior Quality Assurance and Quality Control	HDR Engineering, Inc.
Brian Goss	Project Manager	HDR Engineering, Inc.
Kelly Farrell	Assistant Project Manager/Environmental Scientist	HDR Engineering, Inc.
Ben Fisher	Environmental Scientist	HDR Engineering, Inc.
Mike Madson	Archaeologist	HDR Engineering, Inc.
Randy McCart	Environmental Scientist	HDR Engineering, Inc.
John Mertz	GIS Analyst	HDR Engineering, Inc.
Ann Kulik	Technical Editor	HDR Engineering, Inc.
Contributors		
Melvin Gagnon	Maintenance Supervisor	Grand Portage Band
Tim Cochrane	Superintendent	Grand Portage National Monument
Dave Cooper	Chief of Resource Management	Grand Portage National Monument
Brandon Seitz	Biological Sciences Technician	Grand Portage National Monument

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CHAPTER 6

REFERENCES

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REFERENCES

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APPENDIX A

AGENCY CORRESPONDENCE

Minnesota
Historical Society
STATE HISTORIC PRESERVATION OFFICE

August 17, 2009

Mr. Tim Cochrane
Grand Portage National Monument
National Park Service
PO Box 426
Grand Portage, MN 55605-0426

RE: Construction of Maintenance Facility, Outdoor Storage Yard, and Seasonal Housing Unit
Grand Portage National Monument, Cook County
SHPO Number: 2009-2883

Dear Mr. Cochrane:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800).

We conclude that no historic properties will be affected by implementation of either alternative A or B. Additional survey of alternative C will be needed before a Section 106 review can be concluded.

Contact us at (651) 259-3456 with questions or concerns.

Sincerely,

Dennis A. Gimmestad
Government Programs & Compliance Officer

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