

CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

Voyageurs National Park's General Management Plan/Visitor Use and Facilities Plan (2001) calls for a revision of the 1990 Historic Structures Management Plan and to use criteria such as significance, integrity, condition, public interest, capability of the park to maintain, potential for reuse or continuing use, interpretive potential, and other factors to guide management decisions about the treatment and use of historic properties.¹

Under the Selected Action in the General Management Plan/Visitor Use and Facilities Plan the park would preserve approximately 16-20 of the 30 properties that are on or eligible for the National Register of Historic Places and document and remove the remainder. Six properties that were determined eligible for the National Register in 1992-1993 have been removed or approved for removal since development of the General Management Plan. Therefore, this plan proposes alternatives for the management of the remaining 24 historic properties.

Park Mission, Purpose and Significance

The park's mission, purpose and significance are further defined in the park's strategic plan (1997), Interim Resources Management Plan (2001) and General Management Plan/Visitor Use and Facilities Plan and are also included here:

Mission

Voyageurs National Park preserves the landscapes and scenic waterways that shaped the route of the North American fur traders and defined the border between the United States and Canada. The park and its diverse resources provide outstanding opportunities for outdoor recreation, scientific study, sportfishing, and appreciation of the northwoods lake country setting.

Purpose

- Preserve the scenery, geologic conditions, and interconnected waterways in northern Minnesota for the inspiration and enjoyment of people now and in the future.

¹ The Record of Decision for Voyageurs' General Management Plan/Visitor Use and Facilities Plan was signed in January 2002.

- Commemorate the voyageurs' routes and fur trade with the native peoples of the north, which contributed significantly to the opening of northwestern North America to European settlement.
- Preserve, in an unimpaired condition, the ecological processes, biological and cultural diversity, and history of the northwoods lake country border we share with Canada.
- Provide opportunities for people to experience, understand, and treasure the lake country landscape and its enduring cultural resources in a manner that is compatible with the preservation of park values and resources.

Significance

- The waterways of Voyageurs National Park are part of the most significant fur trade route used in the opening of northwestern North America.
- Located near the headwaters of the Arctic watershed of Hudson Bay, the park's lakes—rather than land—have been the primary travel route throughout history. The lakes continue to shape transportation and recreational uses of the area today.
- The park's exposed rocks and landscape exemplify the glacial activity of the Pleistocene epoch and some of the most complete and extensive Precambrian geologic features in the United States.
- The park preserves the timeless beauty of woods, rocks, water and sky and invites people to renew themselves through a variety of outdoor activities.
- The designation of Voyageurs as a national park is integral to the protection of the boundary waters ecosystem by both the United States and Canada. Along with Quetico Provincial Park and the Boundary Waters Canoe Area Wilderness, Voyageurs was and remains at the heart of a major conservation effort to protect the boreal landscape, its interconnected waterways, and associated wildlife.
- Voyageurs National Park holds vital evidence of the continuity of 10,000 years of human relationships with the environment uniquely dictated by the interconnected waterway system. The park provides an exceptional, largely unstudied storehouse of knowledge for the future and preserves resources associated with a long period of use including those representing the fur trade, American Indians, logging, and recreation.

BACKGROUND

Voyageurs is a large, water-based park encompassing 218,054 acres, of which 83,789 acres are water contained in four large lakes and numerous smaller, interior lakes. The park's main landmass is the heavily forested Kabetogama Peninsula, some 75,000 acres in extent. The large lakes of Voyageurs and their associated islands, small bays, secluded coves, and rocky shorelines were once the scene of an epic chapter in North American history. For a century and a half, American Indian and French-Canadian voyageurs plied this maze of lakes and streams in birchbark canoes, transporting furs and goods between Montreal and the Northwest.

Long before the appearance of the first Europeans, native peoples resided in this vast expanse of land living a lifestyle dependent on the resources offered by the country. The border lakes remained largely undeveloped until the 20th century when the natural resources of the area attracted the attention of miners, loggers, commercial fishermen, hunters, trappers, resort owners and vacationers.

Voyageurs National Park was authorized in 1971 and established in 1975, "...to preserve, for the inspiration and enjoyment of present and future generations, the outstanding scenery, geological conditions, and waterway system which constituted a part of that historic route of the Voyageurs who contributed significantly to the opening of the Northwestern United States."²

The park is isolated amongst the gateway communities of Crane Lake, Ash River, Kabetogama and International Falls. The resorts and summer cabins in these communities are located on the edge of the park but not included within the boundaries. Superior National Forest lies to the southeast of the park and Quetico Provincial Park in Ontario is located to the east.

Summary of Inventory and Evaluation of Historic Structures

Upon establishment, Voyageurs acquired hundreds of structures within its boundaries. In 1975, 248 tracts of land were identified as developed and actively used at the time:³

- 99 state lease cabins
- 1 federal lease cabin
- 120 privately-owned seasonal cabins
- 2 permanent residences
- 11 resorts
- 1 hotel
- 4 organizational properties
- 10 Boise Cascade hunting leases

² Legislation creating Voyageurs National Park.

³ Voyageurs National Park land records.

State and Federal lease cabins: The state-owned lands bordering shores of lakes within state forests have been leased to the public as building sites for summer homes since the program began in 1917. The state lease program provided a way for people of limited means to enjoy a summer home. The state lease program is still active in areas surrounding the park, but leases within the boundary were terminated in 1985. The U.S. Forest Service had a similar leasing program. Carl Lenander, whose family arrived on Rainy Lake in the early 1900s, held the one federal lease.

Seasonal cabins: The area now included in Voyageurs National Park started to attract travelers as early as the 1880s. A few wealthy tourists built summer homes and cabins in the 1920s, but roads to the area were not improved until the late 1930s. Most summer cabins in the park were built in the 1950s and 1960s; a few were constructed after the park was established.⁴

Permanent residences: Homesteading occurred in the northern lakes area in the mid to late 1920s but many people found it difficult to make a living on the lake. The conditions were too harsh or people stayed just long enough to clear and sell the timber on their property. The Kabetogama Peninsula and the many islands in the park are only accessible by water, limiting year round occupation to the most adventurous. I.W. Stevens and Lydia Torry, both well-known inhabitants locally, owned the two permanent residences at the time of the park's establishment.

Resorts and Hotels: Back of the Moon Lodge, Clark's Sand Point Lodge, McDonald's San-Pat Resort and Namakan Narrows Lodge were operating on Sand Point Lake when the park was established. On Kabetogama and Namakan Lakes, Meadwood Resort, Monson's Resort, Mack's Island Resort, Chet's Border Camp, Pine Island Resort, and Whispering Pines Resort provided lodging for tourists. Sherrick's Place was located in the remote interior of the park, on Johnson Lake. The one hotel listed was the Kettle Falls Hotel, a very popular tourist destination since it was built in 1910.

Organizational properties: The YMCA, the Cornbelt Council of the Boy Scouts and St. Thomas Academy of St. Paul were operating youth camps when the park was established. A group of fishermen from Indiana organized and operated the Indiana Northwoods Club for members on Little Trout Lake beginning in the mid-1920s. The remains of one additional organizational property, Camp Marston, is located in the park, but was discontinued before the park was established and was therefore not included in the 1975 inventory. Camp Marston, located on Rainy Lake, was a summer engineering school operated by Iowa State University from 1928-1940.

Hunting leases: Participants in the Boise Cascade hunting lease program were permitted to set up one permanent, movable recreational structure per lease. Dwellings were required to be located a mile or more from any other structure. Most of the Boise Cascade leases were terminated in 1976 and the structures removed.

⁴ Sanford, Dena, "Historic Context for Tourism and Recreational Development in the Minnesota Northern Border Lakes from the 1880s through the 1950s," National Park Service, Midwest Regional Office, Omaha, 1999.

1975 Survey of Historic Structures

In 1975, the Minnesota Historical Society completed a survey to locate National Register-eligible structures in the park.⁵ The survey was conducted to comply with the requirements of Executive Order 11593.⁶ Each structure was evaluated through research (primarily assessor's records), site visits, or interviews with local residents. Field visits were made to 77% of the buildings.

The results of this survey indicated that very little of historical significance remained in the park. Of the 463 structures (on 277 tracts) that were evaluated, two areas were thought to be significant and eligible for the National Register. These included Kettle Falls and the Ellsworth Rock Garden. The Kettle Falls Hotel was added to the National Register in 1976. The Kettle Falls area was expanded to a district and added to the register in 1977. The Ellsworth Rock Garden was found ineligible in 1976 because it was less than fifty years old.⁷

Although the 1975 survey did not locate many historic structures, it did reveal the presence of a large number of historic sites related to early settlement, mining, logging, prohibition, commercial fishing and other activities. Subsequently, the Little American Gold Mine was added to the National Register in 1975 and the Gold Mine Historic District, which included seven mines related to the 1890s gold rush, was added to the register in 1977.

1989-1993 Inventory and Evaluation

Previously evaluated properties are often reevaluated as time passes and ideas about significance change. In 1989, an effort was begun to re-inventory all developed tracts of land in the park, with particular emphasis on locating pre-World War II sites. All developed tracts of land were investigated in some manner, either through analysis of land files or field survey. All structures over fifty years of age and those less than fifty years but thought to be significant were documented on survey worksheets and with video and still photography.

⁵ John J. Hacket and Liza Nagle, "Voyageurs National Park Survey of Historical Structures," Minnesota Historical Society", 1975. The National Register of Historic Places is the official list of the Nation's cultural resources worthy of preservation. The program was created under the National Historic Preservation Act of 1966 and is managed by the National Park Service. Properties listed in or eligible for the National Register include districts, sites, buildings, structures and objects that are significant in American history, architecture, archeology, engineering, and culture. Properties can be locally, regionally, or nationally significant and must meet established criteria for evaluating significance.

⁶ E.O. 11593 instructed all federal agencies to identify and nominate cultural properties to the National Register. The 1980 amendment to the National Historic Preservation Act incorporated the requirements of E.O. 11593.

⁷ Generally, properties that are less than 50 years of age are not considered eligible for the National Register unless they are integral parts of a district or meet other specific criteria. The Ellsworth Rock Garden was reevaluated in 1998 and determined eligible.

During the 1989-90 survey, 313 of 423 developed tracts of land were field-investigated. Thirty-nine tracts were not visited because they were privately-owned, thirty-two properties had already been removed and the remainder of properties was evaluated through photographs. A total of 650 structures on 423 tracts were documented and sixty-eight potentially eligible properties with 174 structures identified.

Review of fourteen properties occurred in 1992 in consultation with the State Historic Preservation Office and all but one property was determined eligible. Concurrence was reached on eligibility of an additional eight properties in 1993. All recreational cabins built prior to the 1930s were found eligible because of their limited numbers. Evaluation of a group of properties was set aside pending completion of a historic context for recreation.⁸ One property less than fifty years of age, the Oveson Fish Camp on Rainy Lake, was determined eligible.

The National Park Service completed the historic context for tourism and recreation in 1999. The criteria developed in the historic context were used to evaluate the significance of the majority of buildings in the park related to recreation. In 2000, the inventory and evaluation of buildings in the park was largely completed and ten additional properties determined eligible for the National Register, bringing the total to thirty.

PURPOSE AND NEED FOR ACTION

The purpose of the Historic Structures Management Plan and Environmental Assessment is to evaluate potential impacts—natural, cultural, and socio-economic—of alternative treatments for 24 properties (with 94 buildings) that have been determined eligible for or are on the National Register of Historic Places. This Environmental Assessment has been prepared by the National Park Service in accordance with the requirements of the National Environmental Policy Act, Director's Order-12 (DO-12), the handbook to DO-12: "Conservation Planning, Environmental Analysis, and Decision Making" and the National Historic Preservation Act.

The park's current Historic Structures Management Plan (1990) is outdated and does not reflect current issues or circumstances. Preliminary evaluation of the significance of historic structures was recently completed and decisions now need to be made about the management of these structures. Several historic structures are in extremely poor condition and preservation funding is insufficient to keep ahead of deterioration. Creative uses, alternative funding sources and partnerships need to be explored to extend preservation capabilities. The majority of use and occupancy reservations, several with historic structures, will

⁸ A historic context is an organizational format that groups information about related historic properties, based on theme, geographic limits, and chronological period. Historic contexts are linked to historic properties through property type. A property type is a grouping of individual properties based on shared physical or associative characteristics.

expire within the next few years, transferring maintenance responsibilities to the park.

A variety of preservation strategies, a focused program, and priorities for action are needed to prevent the loss of significant historic resources and to wisely use limited preservation funds. It is also recognized that it may not be possible to preserve all historic properties in the park.

RELATIONSHIP TO OTHER PARK DOCUMENTS

2001 General Management Plan/Visitor Use and Facilities Plan

The park's General Management Plan/Visitor Use and Facilities Plan calls for revision of the 1990 Historic Structures Management Plan, and to use criteria such as significance, integrity, condition, public interest, capability of the park to maintain, potential for reuse or continuing use, interpretive potential, and other factors to guide management decisions.

Under the Selected Action of the General Management Plan/Visitor Use and Facilities Plan, the park would preserve approximately 16-20 of the 30 properties that are on or eligible for the National Register of Historic Places. The Selected Action also calls for development of 15-20 visitor destinations to interpret the natural and cultural resources of the park.

The General Management Plan/Visitor Use and Facilities Plan defines land and water management areas that could potentially affect the management of historic structures, particularly the level of development, type of use, and accessibility that might be provided. The Land Management Areas are summarized below.

Developed Area: Developed areas are set aside for major visitor facilities and/or park operations. The rehabilitation of historic properties for adaptive use is generally more acceptable in developed areas. Developed areas include visitor centers, contact stations, group campgrounds, administrative offices, maintenance facilities and employee housing areas.

Lakecountry Area: This area includes the shoreline and islands of the four major lakes that are within the park as well as the north shore of Crane Lake. The Lakecountry is divided into three Subareas. Subarea 1 is a high-density use and development zone where a greater degree of development to provide access to the public would be acceptable. Subarea 2 is a moderate density zone where development for public access would be less visible. Subarea 3 is a low-density zone that would have very limited development.

Backcountry Trail Area: Includes hiking, cross-country ski and snowshoe trail corridors. Historic properties are generally not developed for public access.

Primitive Area: Includes the backcountry, except for trails, including areas recommended for wilderness designation. Few facilities would be provided in the primitive area.

1988 Lakecountry and Backcountry Site Management Plan

The Lakecountry and Backcountry Site Management Plan designates the development of a number of campsites throughout the park.⁹ The number of campsites to be constructed was changed by the park's General Management Plan/Visitor Use and Facilities Plan but the criteria for development remains the same. The plan provides for different types of campsites including small campsites, large campsites, group campsites, day use sites including visitor destinations, and houseboat sites.

The campsite plan was completed before the inventory and evaluation of historic structures resulting in proposed campsites and historic structures at the same location. There is a demand for additional campsites, but the number of potential campsites and day use sites in the park is severely limited by topography, shallow soils, high water tables, plant cover, insects, wildlife habitat needs, archeological sites and exposure to lake winds.

Proposed campsites must meet specific criteria for development including protection of resources. In order to protect the integrity of the park's natural and cultural resources, proposed campsites that are in conflict with a critical resource may not be developed. In some cases, it may be possible for a campsite and historic property to co-exist. In other cases, the demand or need for a campsite in a particular location may take precedence over the historic property.

1998 Preservation Treatment Plan: Ellsworth Rock Garden

A plan for preservation and maintenance of the Ellsworth Rock Garden was approved in 1998. The plan recommends overall rehabilitation of the site with restoration of specific primary features. Phase 1 rehabilitation was completed in 2001; Phase 2 is scheduled for 2002.

2001 Interim Resource Management Plan

General Management Plans describe park purpose, significance and desired future conditions of resources and visitor experiences, along with any developments necessary to achieve the desired future conditions. Resource management plans document natural and cultural resources, and describe specific management, monitoring and research programs and projects that are active or needed to achieve objectives and goals described in General Management Plans. Resource management plans are updated every five years.

⁹ The Environmental Assessment for the Lakecountry and Backcountry Site Management Plan was completed in 1986. The plan was completed in 1988.

The National Park Service is in the process of revising guidelines for completing Resource Management Plans. In 1999, Voyageurs completed an Interim Resource Management Plan based on draft guidelines. The Interim plan was updated in 2001 and will be finalized when the guidelines are completed.

2002 Comprehensive Interpretive Plan

An Interpretive Prospectus for Voyageurs was completed in 1981 outlining interpretive goals and objectives for the park and describing existing facilities and interpretive services. While it continues to provide useful general information, the plan is very outdated. A Comprehensive Interpretive Plan will be completed in 2002 that will replace the Interpretive Prospectus. The Comprehensive Interpretive Plan contains several components including interpretive themes, long-range goals and a media plan that will involve interpretation of historic properties.

2002 Environmental Assessment: Kabetogama/Ash River Development

Alternatives for development in the Kabetogama Ranger Station Historic District and the Ash River Developed Area, which affects the Meadwood and Levin historic properties, are being considered in a separate Environmental Assessment. Public review of this document is anticipated in June 2002. This plan reflects the same alternatives as the Environmental Assessment for Kabetogama and Ash River.

2002 Environmental Assessment: Develop Visitor Facilities at Rainy Lake City

Alternatives for development of visitor facilities at Rainy Lake City have already been considered. A Finding of No Significant Impact was signed in February 2002. Under the Preferred Alternative, day use facilities and an interpretive trail will be developed and the Rainy Lake City Saloon will be preserved and used for interpretive exhibits.

OTHER FACTORS AFFECTING HISTORIC STRUCTURES

Secretary of the Interior's Standards for Treatment of Historic Properties

The Secretary of the Interior's Standards for Treatment of Historic Properties specify four types of treatment including preservation, rehabilitation, restoration and reconstruction. These standards are intended to provide a philosophical consistency to treatment of historic buildings. The standards can be applied to a building, parts of a building, or landscapes and other resources associated with a building.

Preservation: Preserving the existing historic character and integrity. This alternative precludes uses that would require major additions or demolition and should always receive first consideration.

Rehabilitation: Maintaining the existing historic character and integrity but allowing for major additions or alterations to accommodate a compatible contemporary use.

Restoration: Reestablishing the form, features, and character of a historic structure at a specific time period. Restoration can be comprehensive or focus on the exterior. Restoration is only acceptable if it is essential for public understanding of the resource and it can be accomplished with minimal conjecture. This treatment permits the reconstruction of missing elements of a historic structure.

Reconstruction: Producing a new structure identical in form, features, and details to a historic structure that no longer exists. Reconstruction is permitted only if it is essential for public understanding, the structure can be built at full scale on the original site with minimal conjecture and significant archeological resources will be preserved in place or their research values will be realized through data recovery. Reconstruction requires the written approval of the Director of the National Park Service.

Discussion of Proposed Uses for Historic Structures

National Park Service policy states that whenever possible, historic structures should be used rather than new facilities constructed. Finding appropriate, compatible uses for historic structures is a challenge at Voyageurs, particularly for seasonal cabins that are typically in remote locations accessible only by water where they cannot be frequently monitored and where a continuing use as a seasonal cabin may not be feasible.

Some historic structures may support park functions such as visitor centers, offices, storage or other operational use. Others may be designated for public use or partnerships. A description of uses proposed in the alternatives is provided here.

Visitor Destination: The park's General Management Plan/Visitor Use and Facilities Plan proposes that 15-20 specific points of interest in the park, natural or cultural, be developed as visitor destinations. Interpretation and picnic facilities may be provided at these sites. Typically visitor destinations would be developed to include a dock, trails, vault toilet, fire ring, picnic table, and interpretive signs, waysides or exhibits. The extent of development would depend on specific site conditions.

Discovery Site: Some historic properties may be more fragile and not able to withstand heavy visitor use, or development would impact the historic integrity of the site or site conditions would preclude extensive development. Historic properties proposed as Discovery Sites would be open to visitors exploring on their own but facilities would be limited to an interpretive sign. Other interpretive media such as brochures, videos, or virtual tours may be used to enhance interpretation.

Artist-in-Residence Camp: The National Park Service has an established Artist-in-Residence program. Professional artists are invited to interpret the environment of parks through their specific art and then communicate the results to the public through a special program or exhibit. Parks provide housing for two participants for a 2-3 week period in August. In return, participating artists are asked to donate a piece of work representative of their style and their stay in the park. Historic properties proposed as Artist-in-Residence camps would be a remote, backcountry experience offered to artists. Potentially the program could be expanded from 2-3 weeks to 1-2 months.

Camping Shelter: Some historic properties are located where campsites are proposed in the Lakecountry and Backcountry Site Management Plan. At these sites, outbuildings would be removed and the primary cabin would provide an alternative for campers who are inexperienced or don't have camping equipment. It could also serve as a day use shelter during inclement weather including by fishing guides preparing shorelunches for visitors. Interior furnishings would be very limited with most amenities such as fire ring, picnic table and vault toilet provided as a part of the campsite.

Volunteer Camp: Some historic properties are proposed for use as short-term, incidental use as backcountry shelters by visiting researchers or volunteers participating in the National Park Service Volunteer-in-Park program. Amenities may be very limited.

Partnerships: Historic structures may also be assigned to other entities if there are no feasible National Park Service uses. The following administrative mechanisms can be used to provide for non-National Park Service use of historic structures:

Leasing: Section 111 of the National Historic Preservation Act provided for the Historic Leasing Program. Historic leasing has had very limited success Servicewide because of the complexity of the program and the administrative burden on parks. The National Park Service has proposed incorporating historic leasing into one leasing authority and simplifying the process for leasing (Federal Register, Vol. 65, No. 239, December 12, 2000). Partnerships, which could involve leasing as the administrative mechanism, are proposed under Alternative 1. If Alternative 1 were selected, the following would need to be determined before leasing any property under the proposed leasing regulations:

- lease would not result in degradation of the purposes and values of the park
- lease would not deprive the park area of property necessary for park protection, interpretation, visitor enjoyment, or administration of the park
- leased property must be used for activity that is consistent with the park purpose
- lease would be compatible with the programs of the National Park Service
- lease for rent would be at least equal to the fair market value rent
- lease would be competitively offered
- proposed activities under the lease are not subject to authorization through a concession contract, commercial use authorization or similar instrument
- lease would adequately ensure the preservation of the historic property

Under the proposed regulations, property would be leased by issuing a request for bids or a request for proposals; however the National Park Service may enter into leases with non-profit organizations or units of government without this requirement.

Special Use Permits: Special use permits allow use of historic structures for short periods of time. They can be canceled at any time and cannot be used for long-term use of a property. One historic property, the Indiana Northwoods Club, is currently maintained under short-term Special Use Permit to protect the building until decisions are made about all historic properties.

Agreements: The National Park Service is authorized to enter into agreements with other agencies, organizations and individuals to more efficiently and economically accomplish the National Park Service mission. The National Park Service is authorized to formalize these relationships through Cooperative Agreements, Interagency Agreements and General Agreements (formerly called Memorandums of Agreement or Memorandums of Understanding). These agreements are used to transfer money, property, services or anything else of value from the National Park Service to the partner to carry out a public purpose in support of any National Park Service program.

Concession Contracts: The National Park Service may contract for accommodations, facilities and services necessary for public use and park enjoyment. Such agreements permit concessioner use of historic structures and concessioners who restore historic structures for a commercial venture under a concession agreement qualify for preservation tax incentives. The historic Kettle Falls Hotel is currently operated under concession contract.

ISSUES

The issues associated with the proposed alternatives for historic properties have been generated through meetings with park staff, public scoping, and

coordination with state, federal and tribal agencies. The key issues that resulted include:

- public access to historic properties is desired
- concerns that visitor access would be restricted by designating properties as historic
- some historic properties have already been lost; loss of more historic properties is not acceptable
- funding should be spent on preservation first and site amenities second
- natural character of the lake/forest environment should be balanced with preservation of historic properties
- preservation of historic properties conflicts with public understanding that the majority of buildings in the park would eventually be removed
- objections by previous landowners to preserving properties that they had to move out of—no one else should be allowed to use them
- previous cabin occupants should be considered a part of the park's history
- operational impacts of maintaining a large number of properties
- significance of some properties, particularly those associated with recreation

IMPACT TOPICS SELECTED FOR ANALYSIS

The proposed action primarily impacts historic properties, park operations, and visitor use and experience. Natural resource impacts are addressed for the varying levels of building removal that would occur with each alternative. Impact topics selected for analysis include:

- Historic structures
- Cultural landscapes
- Geology and soils
- Vegetation
- Wildlife
- Hydrology
- Water and air quality
- Visual resources and noise
- Wilderness
- Visitor use and experience
- Park operations
- Social and economic resources

TOPICS DISMISSED FROM DISCUSSION

Only those resources that may be impacted or affected if a proposal or alternatives are implemented are described in the environmental consequences section. Some specific issues or resources are not discussed in this document either because resources would not be affected, impacts would be negligible, the

topic is or will be discussed in another plan, or it would be in conflict with established laws, regulations, or policies. These include:

- **Land use.** The alternatives do not conflict with area land use plans or policies.
- **Environmental justice.** The alternatives would not affect socially or economically disadvantaged populations either positively or negatively.
- **Unique or prime agricultural land.** There are no agricultural lands in the park.
- **Human health and safety.** The alternatives would not affect human health and safety.
- **Archeological Resources.** Approximately 10 percent of the park has been surveyed and 358 sites are recorded representing both prehistoric and historic periods. Most archeological resources are located along the shorelines of the major lakes. The only sites that have been found in the interior of the park are historic sites associated with lumbering or other more recent activities. Archeological investigation of the historic properties discussed in this plan has been completed for some but not all properties. Inventory and evaluation of archeological resources at historic properties will be completed in 2002. Recommendations for protection of any archeological resources that might be found during this inventory will be incorporated into site specific treatment plans.
- **Ethnographic Resources.** Forty historic archeological sites are considered potential ethnographic resources because of their historic Ojibwe connections (Richner 2002). Potential ethnographic landscapes include Chief Woodenfrog Island, the Moose River area of Namakan Lake, and Cranberry Bay on Rainy Lake. None of the historic properties addressed in this plan are located at any of these Ojibwe sites. No sacred sites or Indian trust resources are affected by the alternatives.
- **Wetlands.** The Hoist Bay and Kettle Falls properties contain small wetlands. However, none of the actions proposed in this Environmental Assessment affect these wetlands. There are no wetlands on the other properties treated in this Environmental Assessment.
- **Use and Occupancy Reservations:** When property is acquired in the park, the owners may be allowed a reservation of use and occupancy of property improved with a residence. The reservation may be for a term of years (up to 25) or for life, located on an area not exceeding three acres in size, and be used for residential uses only. There are currently over 100 use and occupancy reservations in the park, nine of which contain historic structures.

Reservations of use and occupancy are a contractual condition of the conveyance of the property and cannot be extended beyond the expiration date.

- **Properties No Longer Meeting Criteria:** Thirty properties have been determined eligible for the National Register in consultation with the State Historic Preservation Office. Six properties that were determined eligible in 1992 and 1993 no longer meet the criteria of the National Register. These six properties, which include the Shoepack Lookout Tower, Howell's Wilderness Resort, and the Monroe, Swanson, Russian Blueberry and Filben Cabins, have been removed or are approved for removal and will not be discussed in this plan. The plan addresses the remaining 24 properties that are on or eligible for the National Register.
- **Removal of All Historic Structures:** Some people interpret the park's enabling legislation and legislative history to mean that all structures should be removed. While legislative intent must be taken into consideration, the National Park Service is also responsible for identifying and planning for the protection of cultural resources significant at the local, state, and national levels, whether or not they relate to the specific authorizing legislation or interpretive programs of the parks in which they reside. While all historic structures cannot be removed, it also may not be possible to preserve them all. Demolishing a historic structure or deliberately allowing it to decay naturally is justifiable when all other alternatives have been determined infeasible.
- **Exclusive Residential Occupancy:** Most historic structures were acquired from individual families with the understanding that they would eventually be removed. After eliminating residential use from the park, it would be inappropriate and unequitable to provide for private residences or summer homes to an exclusive group of people.
- **Private Inholdings:** Four properties that are privately owned have been determined potentially eligible for the National Register. Although treatment has been proposed for privately owned property under three action alternatives, these properties would be re-evaluated when they are acquired and treatment reconsidered at that time. Private property is acquired when there is a willing seller and available funds for acquisition or if there is a threat to natural or cultural resources, including the historic integrity of a property considered eligible for the National Register. The historic integrity of a property could be threatened through extensive remodeling, construction of additional structures or removal of buildings.

CHAPTER 2: DESCRIPTION OF ALTERNATIVES

This section describes a no action alternative and a range of reasonable alternatives that meet objectives for the management of 24 historic properties with 94 buildings. Reasonable is defined by the National Environmental Policy Act as economically and technically feasible. A no action alternative is provided for comparison purposes and is required in all Environmental Assessments.

The alternatives are described below followed by a comparative summary. The alternatives are described in greater detail in Appendix A and by cultural theme on page 22. The alternatives address buildings on historic properties. Some historic properties contain other structures and/or landscape features such as root cellars, ruins, sculptures, and chimneys. Although these alternatives only address buildings, more specific management plans for each property will address all resources on that property.

NO ACTION

A No Action alternative means that the proposed activity (Historic Structures Management Plan) would not take place. Without a Historic Structures Management Plan, it is assumed that historic properties that are currently preserved and maintained as park and concession facilities would continue to be preserved and maintained. This would include buildings within the Kettle Falls and Kabetogama Ranger Station Historic Districts, and Meadwood Lodge. It is also assumed that properties with an approved treatment plan that has been implemented to a large degree would also continue to be preserved and maintained. This would include the Ellsworth Rock Garden.

Although some investment has been made in other historic properties through stabilization and interim preservation maintenance, continuing investment would not be assured for the other twenty historic properties. Without a historic structures management plan to guide long-term management and maintenance, treatment decisions would not be made, priorities would not be determined, uses would not be defined, and properties would lack the validation needed to become a routine part of park operations. These properties would be lost over time through indifference, neglect, and/or removal.

ALTERNATIVE 1: Emphasis on Individual Properties

The emphasis with this alternative is on the significance and condition of individual properties. Generally, all buildings associated with a particular property would be preserved, thereby retaining a high degree of integrity and a complete record of development at each site.

This alternative proposes finding partners to maintain historic properties by encouraging educational, organizational or other public uses (excluding residential use) for ten properties. The majority of properties are small, recreational cabins. Providing for continuing use as seasonal residences is not feasible so other public uses would need to be explored under this alternative. If successful agreements could be reached to maintain historic properties through Cooperative Agreements, the Historic Leasing Program, or other administrative vehicles, the partner would share the cost of maintenance.

This alternative would result in retaining 20 of 24 historic properties with 66 buildings. It proposes removal of historic properties that are located where campsites are planned and proposes retaining properties located in Lakecountry Subarea 3 and the Primitive Area where the density of development is intended to be low (see pages 9-10 for definitions of Lakecountry and Primitive Areas).

This alternative would result in the removal of the following historic properties: Finstad property, the majority of structures at the I.W. Stevens property, which is in poor condition, the Chipperfield cabin and associated buildings at the Ingersoll property, and the Casareto property.

ALTERNATIVE 2: Emphasis on Landscape View

Alternative 2 emphasizes a broad landscape view of the park and the importance of the properties as a collection rather than the completeness of each individual property. All properties would be preserved under this alternative, but a minimum number of buildings at each site would be retained to maintain an individual property's historic integrity.

Alternative 2 recognizes that recreation and tourism played an important economic role in the development of the region by preserving the most examples of the 650 recreation-related structures that once dotted the park.

A variety of alternative and mixed uses are proposed under this alternative including park operations, visitor destinations, shelters at campsites, short-term housing for volunteers, and using historic properties to support or expand the park's Artist-in-Residence program. Maintenance responsibilities would be retained by the park, but the sources of potential funding would be more diversified.

With this alternative, 24 of 24 historic properties would be preserved but 38 of 94 structures at those properties would be removed.

ALTERNATIVE 3: Emphasis on Best-Known Properties

Alternative 3 proposes preserving a representative property from each cultural theme but focuses on historic properties that are highly visible and well known to local and summer residents and long-time visitors to the park. Properties under this alternative would retain a high degree of integrity through preservation of all associated buildings at each property.

Alternative 3 proposes preservation of properties concentrated closer to park developed areas, thereby contributing to efficiencies in long-term routine and cyclic maintenance and where they are more accessible to the public. The majority of properties retained under this alternative would be developed as major visitor destinations.

Alternative 3 would result in preservation of 14 of 24 historic properties containing 70 buildings. The following properties would be removed under this alternative: Finstad, Garrett, Rice/Gruner, Couture/Shermoen, Jr. Island/Brown, Sugarbush, Palmer/Luce, Zollner, Mittet, and Indiana Northwoods.

ALTERNATIVE 4: Emphasis on Interpretive Stories (Preferred)

Alternative 4 recognizes the collective value of historic properties as well as the individual significance of some properties, retaining a high degree of integrity at some individual properties, while removing some structures at others.

Under this alternative, privately owned historic properties are identified as possible additions for the future, potentially providing additional representatives of early, middle and late recreational cabins.

Alternative 4 provides for visitor access to the majority of properties, but recognizes that major development may be inappropriate at some properties and that some properties cannot withstand heavy visitor use. Some properties would be developed as visitor destinations while others would have more limited access and be considered sites for visitors to discover while exploring on their own. This alternative also proposes using other techniques besides on-site facilities to interpret the history of these properties. Under this alternative, a variety of media, such as brochures, boating guides, web-based information, virtual tours, and videos would be used to interpret historic properties, including those proposed for removal.

Alternative 4 proposes multi-use opportunities for camping, interpretation and education at Hoist Bay but removal of other properties where houseboat and tent sites are proposed. It focuses on properties that have greater interpretive potential and provides for varying levels of visitor access to the majority of properties. Alternative 4 would result in preservation of 16 properties, containing 50 buildings, with future potential of 4 additional properties.

COMPARATIVE SUMMARY

	Alternative 1	Alternative 2	Alternative 3	Alternative 4 (Preferred)
Number of Historic Properties	20	24	14	16
Number of Historic Structures	66	56	67	50
Distribution of Properties Across Park	Rainy-7 Kab/Nam-10 Sand Pt./Crane-2 Interior-1	Rainy-9 Kab/Nam-11 Sand Pt./Crane-3 Interior-1	Rainy-4 Kab/Nam-8 Sand Pt./Crane-2 Interior-0	Rainy-5 Kab/Nam-8 Sand Pt./Crane-3 Interior-0
Proposed Uses	Focuses primarily on partners to maintain properties	Provides for a variety of uses such as park operations, visitor destinations, camping shelters & artist camps	Focuses on interpretation by developing properties as visitor destinations	Focuses on interpretation by using a variety of interpretive techniques
Estimated Cost of Ultimate Treatment	\$1,838,707	\$1,459,016	\$1,687,678	\$1,220,212
Estimated Cost of Routine Maintenance Over 20 Years	\$520,093 (\$26,000--average annual cost)	\$687,513 (\$34,375—average annual cost)	\$728,740 (\$36,437—average annual cost)	\$604,845 (\$30,242—average annual cost)
Estimated Cost of Cyclic Maintenance Over 20 Years	\$1,030,197	\$927,997	\$1,044,958	\$871,638
Estimated Cost of Site Development and Interpretation	\$936,300	\$871,000	\$1,763,200	\$1,550,614
Estimated Cost of Building Removal	\$51,040	\$93,704	\$68,716	\$75,488
TOTAL	\$4,376,337	\$4,039,230	\$5,293,292	\$4,322,797

*Note: See Appendix C for definition of terms and Appendix D for more detailed cost estimates

SUMMARY OF ACTION ALTERNATIVES BY CULTURAL THEME

THEME	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Early Settlement				
<i>Homestead</i>	Kaukola	Kaukola	Kaukola	Kaukola
<i>Stopping Place</i>	Rainy Lake City Saloon			
Recreation				
<i>Estate</i>	Ingersoll Estate	Ingersoll Estate	Ingersoll Estate	Ingersoll Estate
<i>Cabin (Early)</i>	Jun Fujita Cabin	Jun Fujita Cabin	Jun Fujita Cabin	Jun Fujita Cabin
	Mittet Cabin	Mittet Cabin		Mittet Cabin
	Palmer/Luce Cabin	Palmer/Luce Cabin		
	Rice/Gruner Cabin	Rice/Gruner		(Rice/Gruner)*
<i>Cabin (Mid)</i>	Garrett Cabin	Garrett Cabin		Garrett Cabin
	Jr. Island Cabin	Jr. Island Cabin		(Jr. Island)*
		Couture Cabin		
		Casareto Cabin	Casareto Cabin	Casareto Cabin
		Finstad Cabin		(Finstad Cabin)*
<i>Cabin (Late)</i>	Levin Cabin	Levin Cabin	Levin Cabin	Levin Cabin
	Sugarbush Camp	Sugarbush Camp		
	Ellsworth Rock Garden	Ellsworth Rock Garden	Ellsworth Rock Garden	Ellsworth Rock Garden
<i>Resort</i>	Kettle Falls	Kettle Falls	Kettle Falls	Kettle Falls
	Monson's Hoist Bay Resort			
		I.W. Stevens	I.W. Stevens	I.W. Stevens
	Meadwood Lodge	Meadwood Lodge	Meadwood Lodge	Meadwood Lodge
<i>Sporting Club/Camp</i>	Camp Marston	Camp Marston	Camp Marston	Camp Marston
	Indiana Northwoods	Indiana Northwoods		
	Zollner Outpost	Zollner Outpost		(Zollner Outpost)*
Commercial Fishing				
<i>Camp</i>	Oveson Fish Camp	Oveson Fish Camp	Oveson Fish Camp	Oveson Fish Camp
Conservation Period				
<i>Ranger Station</i>	Kabetogama Ranger Station	Kabetogama Ranger Station	Kabetogama Ranger Station	Kabetogama Ranger Station

*Under alternative 4, privately owned properties, when acquired, would provide additional representatives under that theme.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Alternative 4 is the environmentally preferred alternative. It provides the greatest balance between preservation of the built environment and the natural environment, offers many new visitor opportunities while providing a level of development that is sympathetic to site resources, acknowledges funding limitations, and provides greater flexibility for preserving other significant cultural resources such as archeological and ethnographic resources.

CHAPTER 3: DESCRIPTION OF AFFECTED ENVIRONMENT

This section summarizes the environments and resources that would be affected by the alternatives.

CULTURAL RESOURCES

Cultural Landscapes. One cultural landscape, the Ellsworth Rock Garden, has been determined eligible for the National Register and may be nationally significant. Other potentially eligible landscapes may include historic sites such as the remains of logging camps or commercial fishing camps, sites related to gold mining, or ethnographic sites. Landscape features are also associated with most historic structures.

Historic Structures. A list of the properties affected by this plan is provided below followed by more detailed descriptions of each property. The properties are grouped by cultural theme. A national thematic framework was developed by the National Park Service in 1936 and most recently revised in 1996. This framework is used by all Federal agencies and by many in the private and public sector to evaluate properties, to assess how well the themes are represented in the country by properties, and to enhance interpretive programs. Park-specific themes have been identified within the national framework (see Appendix B). All photographs and information are from Voyageurs National Park collections unless otherwise noted.

SUMMARY LIST OF HISTORIC PROPERTIES

CULTURAL THEME	LOCATION
Early Settlement	
Rainy Lake City Saloon	Rainy Lake
Kaukola Homestead	Namakan Lake
Recreation	
Seasonal Estate	
Ingersoll Estate	Sand Point Lake
Early Period Cabin (1880s-1920s)	
Rice/Gruner Cabin	Rainy Lake (privately owned)
Jun Fujita Cabin	Rainy Lake
Mittet Cabin	Sand Point Lake
Palmer/Luce Cabin	Kabetogama Lake
Mid-Period Cabin (1930-1939)	
Garrett Cabin	Rainy Lake
Jr. Island/Brown Cabin	Rainy Lake (privately owned)
Finstad Cabin	Rainy Lake (privately owned)
Couture/Shermoen Cabin	Rainy Lake
Casareto Cabin	Crane Lake
Late-Period Cabin (1940s+)	
Levin Cabin	Kabetogama Lake
Sugarbush Camp	Kabetogama Lake
Ellsworth Rock Garden	Kabetogama Lake
Resort	
Kettle Falls	Namakan Lake
Monson's Hoist Bay	Namakan Lake
I.W. Stevens Pine Cove	Namakan Lake
Meadwood Resort	Kabetogama Lake
Sporting Club/Education Camp	
Indiana Northwoods Club	Little Trout Lake
Camp Marston	Rainy Lake
Zollner Outpost	Namakan Lake (privately owned)
Commercial Fishing	
Harry Oveson Fish Camp	Rainy Lake
Conservation Period	
Kabetogama Ranger Station	Kabetogama Lake

DESCRIPTIONS OF HISTORIC PROPERTIES

Early Settlement

The border lakes area remained largely inaccessible and undeveloped by Europeans until the 20th century, when the natural resources of the area attracted

the attention of miners, loggers, commercial fishermen, homesteaders and recreationists. Euro-American immigrants quickly pushed into Minnesota when it became a state in 1858; however unceded Ojibwe land in northern Minnesota was unavailable to settlers until 1889. Very few structures still exist that represent this early period of settlement in the Voyageurs area.

Kaukola Homestead

Walter Kaukola homesteaded on Kubel Island on Namakan Lake in 1921 and constructed the cabin the following year. He was a trapper and a cruiser for a timber company. Walter's brother Eino homesteaded on nearby Sexton Island, but abandoned the homestead. Walter moved Eino's cabin to Kubel Island for use as a sauna. Of Finnish descent, the Kaukola family represents a group of people who settled in the Kabetogama/Namakan area because the lakes reminded them of Finland.

The finely constructed log cabins were built in traditional Finnish style. The Kaukola property is one of the few resources that represent the homestead/early settlement period in the park area. The property consists of a log cabin and the ruins of the sauna. The property is occupied under use and occupancy reservation, which expires in 2003.¹⁰



Kaukola Cabin

Rainy Lake City Saloon

Although the exact construction date is unknown, the Rainy Lake City saloon appears to have been in place by 1910. This was a time of renewed interest in Rainy Lake City after the initial gold rush of the 1890s prompted incorporation of the town. By 1922, the building functioned as a "blind pig" for the illegal sale of liquor. For a brief time during the 1930s, the building served as a dining facility

¹⁰ When land is acquired in the park, landowners are given an option of retaining a term or a lifetime lease that allows former owners to occupy the property for a fixed number of years (usually twenty-five).

for the Rainy Lake City Resort. After World War II, the Palmers remodeled the building for use as a vacation cabin.

The Rainy Lake City saloon provides tangible evidence of the development of settlement in the area and illustrates the lifestyles of early settlers. The building's simple design and construction methods evoke the days when frontier towns seemed to spring up overnight. The Rainy Lake City saloon is also significant for what it can reveal about the prohibition period and the importance of the liquor trade to the economy of the region at a time when there was high unemployment. It also represents the enduring frontier quality of the area. There is also a significant multi-component archeological site on the property. Restoration of the saloon was completed in 1998. A shed from the Palmer Cabin period also remains on the site.



Rainy Lake City Saloon

Recreational Activities

Since the turn of the century, tourism has played a significant economic role in the development of the Voyageurs National Park area. At the time of the establishment of the park in 1975, 650 summer homes, weekend cabins, hunting shacks, resorts and state lease cabins dotted the landscape. Although many have since been or will be removed, the surviving structures represent the evolution of tourism in northern Minnesota. The development of tourism and recreation can be divided into three periods—the early period from the 1880s to the late 1920s, the mid-period from 1930-1939 and the late period beginning in the 1940s. Architectural styles, building materials, type and relative numbers of structures can be distinguished for each period.¹¹

¹¹ For more information, see “Historic Context for Tourism and Recreational Development in the Minnesota Northern Border Lakes from the 1880s through the 1950s,” National Park Service 1999.

Seasonal Estates

Ingersoll Estate

Seasonal estates were generally the first recreational cabins built in the park area. They are different from seasonal cabins in that they contained substantial structures built as summer homes for wealthy owners. The buildings are more likely architect-designed, constructed by experienced craftsmen, and built of higher-grade materials. Two examples existed in the park—the Ingersoll property on Sand Point Lake and the Lenander property, which has been removed, on Rainy Lake. Examples outside the park include the E.W. Backus property (now known as Windsong) and Bror Dahlberg’s “Redcrest” (most recently known as the Musket Inn), both located on Rainy Lake.

William P. Ingersoll was a wealthy philanthropist from Canton, Illinois who acquired his wealth through the family-owned International Harvester Company. Ingersoll was also an inventor and very interested in the latest technology. This was reflected in his choice of vacation cabins. Ingersoll acquired the island on Sand Point in 1927 and erected a Hodgson cabin in 1928.



*Ingersoll Estate (date unknown)
Original from Ingersoll family collection*

The Hodgson Company was established in Dover Massachusetts in 1892 and is the oldest building prefabricating company in the United States. Hodgson houses were built in 6-foot, prefinished sections at the factory and assembled on site using the “wedge key bolt,” a Hodgson invention. The Hodgson houses differed from other prefabricated buildings in that they did not have a set number of plans or designs but instead offered special panel sections that could be configured to an individual design.

The property consists of the Hodgson house, generator shed and associated landscape features. The Ingersoll cabin is currently vacant. It was stabilized in 1998 and is in good condition. The property also contains another prefabricated cabin, sauna/shop, boathouse and the ruins of a caretaker’s cabin. Mr.

Ingersoll's friend, Senator Chiperfield, reportedly constructed the cabin. These latter buildings remain under use and occupancy reservation until 2002.



Chiperfield Cabin on the Ingersoll Estate

Seasonal Cabins-Early Period

Rice/Gruner Cabin

J.W. Gruner, who came to Rainy Lake in the 1930s to conduct a U.S. Geological Survey, acquired the two-story, log-sided cabin from Albert "Colonel" Rice. Rice came to Rainy Lake during the 1890s gold rush on Rainy Lake and built the cabin sometime during the 1920s. The cabin represents the early period of tourism and recreation.



Rice/Gruner Cabin

The property, which is privately owned, consists of the Rice cabin and a bathhouse, which is built over the Hope-Still gold mine. The more recent 1960s cabin, privy and boat tram are not eligible for the National Register.

Mittet Cabin

Trapper Iver Mittet homesteaded on Sand Point Lake in 1920. When he died in 1944, the property transferred to his friend and neighbor on the lake, Dr. William Monroe. The cabin represents a typical transition of uses from early settlement to recreation and is a good example of vernacular log architecture from the early

period of recreation. The property also contains a log ruin, log ice house and a workshop and is occupied under use and occupancy reservation until 2003.



Mittet Cabin

Palmer/Luce Cabin

The Palmer/Luce cabin represents the early period of recreation. The owner of the first resort on Ash River constructed the cabin in 1930. The appealing rustic character of the cabin is carried to the interior with its furnishings. The property, which remains under use and occupancy reservation until 2003, contains a log/frame cabin, shed and water tank.



Palmer/Luce Cabin

Jun Fujita Cabin

Jun Fujita, a photojournalist and poet from Chicago, constructed his three-room cabin on a small island on Rainy Lake in the late-1920s. Fujita, who was born in Hiroshima, Japan in 1888, immigrated to Canada as a teenager to photograph lumbering activities. Moving to Chicago sometime before 1915, he was one of the earliest Japanese-Americans to achieve prominence in the Midwest.

After a fifteen-year career in news photography, Fujita turned to commercial and artistic work. It was on Rainy Lake where Fujita found inspiration for his artistic and commercial work, which included poetry, short stories and photography.

Fujita was very successful in his commercial photography, doing work for Stark nurseries, Sears Roebuck, the Federal Government and Johnson motors. Advertisements for Johnson Motors included photographs taken by Fujita of Rainy Lake scenes and personalities. The Fujita property consists of a frame/log cabin and two newer, non-contributing structures. The property was placed on the National Register in 1996. The property is occupied under use and occupancy reservation until 2005.



Fujita Cabin

Seasonal Cabin—Mid-Period

Garrett Cabin

The Garrett Cabin, constructed between 1929-1931 on Rainy Lake by the Garrett family, is a good example of mid-period recreational cabins. The cabin grew over time with several additions but each addition was carefully constructed to blend with the landscape by designing around natural features and notching roof lines to yield to individual trees. These influences are also reflected in the interior of the cabin. The Garrett cabin remains under use and occupancy reservation until 2004.



Garrett Cabin

Ellsworth Rock Garden

Jack Ellsworth, a Chicago contractor who spent summers on Kabetogama Lake from 1944-1965, built the Ellsworth Rock Garden on a sixty-foot granite outcrop. Eventually the site grew to approximately 62 flowerbeds, which were accented with stone statuary. The garden became known regionally as the “Show Place of Lake Kabetogama.” Mr. Ellsworth opened the garden to the public and provided tours to local residents and tourists.

The Ellsworth Rock Garden is an outstanding and unique example of “outsider” or vernacular art environment. Although Mr. Ellsworth was not a formally trained artist, the garden represents his unique creative expression and attitudes toward beauty and nature. The uniqueness and magnitude of Mr. Ellsworth’s creation, the garden’s importance as a recreational destination, and its rarity in the region, establish its exceptional importance at the local level.

The property was evaluated for the National Register in 1980 and determined ineligible. Consequently the house was removed and the gardens abandoned. The property was reevaluated in 1998 and determined eligible. The property consists of the gardens with nearly 200 sculptures, a guest cabin, workshop and privy. A Preservation Treatment Plan was approved for the Ellsworth property in 1998.



Ellsworth Rock Garden ca1965

Finstad Cabin

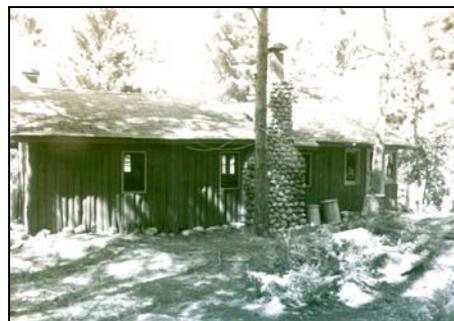
The Finstad family purchased this Rainy Lake cabin from a Northwestern University professor in 1946. The architecture of the cabin is a classic style with its half-log siding, casement windows and green roll roofing. It represents the mid-late recreational period. The property remains in private ownership.



Finstad Cabin

Couture/Shermoen Cabin

The Couture family constructed this log cabin in the late 1930s. The chimney was constructed by Harry Erickson, Sr., who constructed several chimneys for cabins on Rainy Lake. The property consists of the main cabin, a guest cabin, boathouse and shed and remains under use and occupancy reservation until 2005.



Couture/Shermoen Cabin

Jr. Island/Brown Cabin

The log cabin was constructed in 1929 by early Rainy Lake resident Carl Lenander, who built it for his son, Carl Lenander, Jr. The cabin represents mid-period recreation and is representative of a classic vacation cabin construction technique. There are four outbuildings on the property in addition to the log cabin. The property is privately owned.



Jr. Island/Brown Cabin

Casareto Cabin

Jacob Casareto, a physician from Worthington, Minnesota, had this log cabin constructed on Crane Lake by local carpenters in 1934. It is significant for its architectural style and its association with the middle period of recreational history. The property consists of the log cabin and several outbuildings including a boathouse, power shed, laundry, woodshed, sauna and two storage sheds. The property remains under use and occupancy reservation until 2003.



Casareto Cabin

Seasonal Cabin—Late Period

Levin Cabin

Ted Mead constructed this large log cabin at Kabetogama Narrows about 1938 for his friend Dr. Adolph Levin, a chiropractor from Virginia, Minnesota. The building is constructed in the style of the great Adirondack rustic lodges. The

decorative treatment of the logs, the casement windows, the natural interior finishes and the extensive stonework in the foundation and chimneys are contemporary with the aesthetics and philosophies of early designers from the 1930s. Few examples of this style of architecture and skilled workmanship exist in the area. The property also contains important landscape features including flowerbeds, stone paths, and a water tank. The cabin is currently vacant and in good condition.



Levin Cabin

Sugarbush Camp

This small log cabin on Kabetogama Lake was constructed in 1939 by a man named Beebee (first name unknown) and is representative of late recreational period regional construction style and technique. The property remains under use and occupancy reservation until 2003.



Sugarbush Camp

Resorts

Kettle Falls Historic District

Kettle Falls has been a portage area as long as people have used the boundary lakes for travel. The falls were well-known to American Indians, early fur traders, explorers, gold miners, commercial fishermen and loggers who had to frequently circumvent this transportation barrier when traveling between Namakan and

Rainy lakes. There have been accommodations at Kettle Falls since the late 1890s when travelers on their way to the gold fields rested overnight at the “stopping house” at Kettle Falls. In 1910, E.W. Backus’ Minnesota and Ontario Power Company began construction on the dams at Kettle Falls, which were completed in 1914. During this period, an estimated 200 people lived at Kettle Falls. Recognizing the potential for business from lumbermen and tourists, timber estimator Ed Rose constructed the Kettle Falls Hotel around 1910. Robert Williams acquired the hotel in 1918 and it remained in the Williams family until 1977.

The Kettle Falls Hotel was added to the National Register in 1976. The Kettle Falls Historic District, which was added to the National Register in 1978, incorporated the Kettle Falls Hotel, Kettle Falls Dam (owned by Boise Cascade), and the 1910 damtender’s cabin, which was restored in 1994. The fishhouse, garage (now camp store), boathouse, the horse barn ruin, 1945 damtender’s house (also known as the Company House or Boise House) and shed, and a shed located on the Rainy Lake side, are contributors to the historic scene at Kettle Falls. There are also numerous archeological sites within the district. The hotel and several outbuildings are maintained by a park concessioner. The park maintains other buildings.

Monson’s Hoist Bay Resort

Ted and Fern Monson acquired the Hoist Bay property on Namakan Lake in 1939. The property was formerly a railroad hoist camp for the Virginia & Rainy Lake lumber company. The Monson’s spent the first few years clearing the remains of the lumber camp and building rental cabins. The Monson’s eventually sold the resort to Mr. and Mrs. Herbert Hood who operated the resort until 1973, when the park acquired it. Hoist Bay Resort represents an important change in the expectations and activities of tourists to the area.



Monson’s Hoist Bay Resort Cabin

It represents a middle class becoming accustomed to the independence and adventure that the automobile offered. The lakes in the park became accessible by improved highways during the 1930s and many resorts were constructed during that period. The resort industry is now in a period of transition in

Minnesota. Large year-round resorts offering more luxurious accommodations are slowly replacing the small, traditional, rustic “ma and pa” resorts like Monson’s.

The property consists of a large complex of buildings related to the resort. The buildings are in fair condition. The resort was built on the site of the railroad hoist camp constructed by the Virginia & Rainy Lake lumber company and contains both landscape and archeological features related to the logging period.

I.W. Stevens Pine Cove Resort

Ingvald Walter Stevens was born in Norway in 1885 and came to America at age nineteen. He lived in Hibbing for sixteen years and came to northern Minnesota on his vacations. In 1932, because of poor health, he left the city life and bought an island on Namakan Lake. The 400-acre island was a former headquarters for the Virginia & Rainy Lake lumber company.



I.W. Stevens' House

“Steve,” as he became known, re-used some of the V&RL buildings and built additional cabins to operate a fishing lodge, but retired from that business in 1959. He was a prolific writer, keeping a daily journal, writing articles for outdoor magazines and answering fan mail. His solitary, year round life on Namakan Lake became legendary after numerous radio stations, newspapers and magazines related stories of his experiences.



Guest Cabin at Pine Cove Resort

Steve lived on the island until 1973 and died in 1989 at the age of 104. One cabin and the sauna are meticulously constructed in Finnish log architecture style. The property consists of I.W. Stevens' house, which may date to the logging period, ruins from the V&RL period and buildings associated with the resort. I.W. Stevens' garden, which is located across a bay, is also associated with the property. Two of the cabins (the "New" and the "Honeymoon") have collapsed and all but two buildings are in fair to poor condition.

Meadwood Resort

Ted Mead, along with two Finnish carpenters, constructed the lodge and several vacation cabins at Kabetogama Narrows about 1935 for hunters and fishermen. Tourists during the 1930s enjoyed the concept of a "wilderness" vacation, but also expected some comforts of home. To reach the resort, guests traveled the Ash River Trail to Frontier Landing where Mr. Mead provided boat transportation for the 3-mile trip to the resort. A road to the resort was constructed during the 1950s.



Meadwood Resort Sauna

The Mead cabins were carefully sited to provide a picturesque view of the lake but were located sufficiently apart to assure privacy. Ted Mead sold the resort in 1949. The Meadwood Lodge and sauna exhibit superior craftsmanship in log construction and are evocative of the rustic-style vacation retreats of the 1930s. Most of the cabins were removed about 1977. Currently, the property consists of the lodge, sauna, and a cabin constructed in the 1960s. The lodge houses the park's Ash River Visitor Center, the cabin is used for housing, and the sauna is currently vacant and in good condition.

Indiana Northwoods Clubhouse

Wilderness scenery, wildlife, and the opportunity to participate in water-related activities, particularly fishing and boating have attracted sportsmen to northern Minnesota since the 1890s. Sporting clubs were organized for the privilege of hunting and fishing for members only.



Indiana Northwoods Clubhouse

The Indiana Northwoods Clubhouse, built in 1925 on Little Trout Lake, an interior lake in the southern end of the park, is a good example of a private sporting club. A local builder for a group of Indiana businessmen constructed the 1290sf clubhouse. Membership was restricted to twelve and new members were allowed only when another member died. The property is occupied by the Indiana Northwoods Club under a Special Use Permit, which expires in 2002.

Recreation—Group Camps

Zollner Outpost (hunting)

Theodore Zollner was a metallurgist and founded the Zollner Machine Works in Duluth, Minnesota in 1912. The company was moved to Fort Wayne, Indiana, in 1931 and specialized in the manufacture of heavy-duty aluminum pistons. Zollner received the Army and Navy award for excellence for the contribution his pistons made to World War II efforts. Zollner was an avid sports and outdoors enthusiast and was the “silent partner” behind the Detroit Pistons. In the mid-1940s, he constructed a vacation cabin on Kabetogama and a hunting lodge near Kettle Falls and was a well-known local figure during that period. The vacation cabin on Kabetogama was removed in 1981. The hunting lodge property on Namakan Lake consists of a small dormitory-style cabin and several newer outbuildings. The property is privately owned.

(Photograph not available)

Camp Marston (educational)

From 1922-1940, Iowa State University operated a summer camp for civil engineering students at Camp Marston in Brown's Bay on Rainy Lake. Camp Marston represents another aspect of recreation. Group camps were designed to provide experiences to a number of people, either for recreational purposes, educational activities or a combination of both. Organizers specifically sought the remote, wilderness setting of northern Minnesota for this experience.



Polaris Cabin at Camp Marston

The topography of Rainy Lake offered the technical challenges desired by the University to train students. The remoteness of the area offered fewer distractions than camps located in urban areas. Students not only received an intense educational experience, but also made important contributions to the surveying and mapping of Rainy Lake. In 1937, a conference of surveying instructors held at the camp led to the formation of national standards for land survey practices and establishment of the American Congress on Surveying and Mapping in 1941.

When the camp closed, the State divided the property into state lease lots. Some of the cabins were removed; others significantly modified. Today the property consists of the cabin known as "Polaris" and the foundation/chimneys from other former structures. Although most of the buildings have been removed, the landscape retains historic integrity. The Polaris cabin is currently vacant and in fair condition.

Developing the American Economy--Commercial Fishing

Large-scale commercial fisheries, primarily interested in the production of sturgeon caviar, began in this area in the 1890s, but were short-lived because of the long distance to market, the lack of refrigerated transit and increasing regulation of the industry through time. Small-scale family fishing operations, however, reached a peak in 1910 when the number of licensed fishermen in the area reached forty-eight. After 1910, commercial fishing steadily declined with competing pressure from sportfishermen and additional regulations. By 1942, only ten licensed fishermen operated on Rainy and Namakan Lakes.

Harry Oveson Fish Camp

Harry Oveson constructed a camp in Cranberry Bay in the late 1950s and had a license to fish whitefish in fifteen sections of Rainy Lake. Oveson's is the only remaining intact commercial fishing camp in the area. The property consists of the Oveson house, ice house and fish processing building. The dock and boardwalk and tools of the trade are also associated with the property. All buildings were stabilized in 1994 and are in good condition. The site is a popular destination for local residents.



Ice House at Oveson Fish Camp

Transforming the Environment—Conservation Period

Leaders in northern Minnesota recognized the importance of abundant forests and wildlife in the late-nineteenth century. Fire damage in the region in 1894 raised additional alarms for conservation, prompting the authorization of forest reserves in 1899. The Minnesota Forest Service was established in 1911 and a large reserve known as the Minnesota State Forests was created, which incorporated the Kabetogama District. The Civilian Conservation Corps, mandated through federal legislation in 1933, carried forth the state program of forestry management. The Civilian Conservation Corps accomplished many permanent improvements and conservation work in the Kabetogama District. They provided the means for maintaining the forestry resources so valued in Minnesota. Buildings constructed by the Civilian Conservation Corps now represent their continuing importance.

Kabetogama Ranger Station Historic District

The Civilian Conservation Corps between 1933 and 1941 constructed the Minnesota Forest Service ranger station complex at Kabetogama. The buildings represent fine examples of rustic architecture characteristic of federal relief program structures constructed throughout the nation in the 1930s. The property, which was placed on the National Register in 1993, includes the original Minnesota Forest Service patrol cabin, constructed in 1921, and several

structures constructed by the Civilian Conservation Corps. The National Park Service currently uses these structures for district operations. The patrol cabin is vacant but in good condition.



Kabetogama Ranger Station

NATURAL RESOURCES

Park staff used the following resources to prepare the Natural Resources section:

- Detailed vegetation map, complete with general soil information by vegetation type
- Black and white photos of the properties and structures
- Cultural landscape inventory data sheets for eight of the properties
- Field notes collected by park staff
- Eagle-nesting occurrence database
- Rare plant occurrence database

Geology and Soils: The park is located on the Canadian or Precambrian Shield. The shield, which is exposed throughout about half of Canada, dips into the United States along the international border in Minnesota. The rocks of the Canadian Shield are extremely hard and resistant to erosion. The oldest park rocks have been aged at 2.78 to billion years and the youngest intrusive rocks at 2.12 billion years (Ojakangas and Matsch 1982). The Precambrian features in Voyageurs are some of the most complete and extensive in the United States and are not evident in any other national park areas.

The soils of the park were influenced by the action of Pleistocene glaciers operating on Precambrian rocks. Pleistocene glaciers scraped and eroded the rocks of the Precambrian shield, removing soils that had formed in the area during the tens of thousands of years since the last glacial period. Lakes and ponds were formed both in glacial depressions and behind glacial ice dams. Over

thousands of years, accumulating peat has converted some lakes and ponds formed in glacial depressions, to bogs or fens. Lakes created behind ice dams (termed glacial lakes) drained when the dams deteriorated and left thick deposits of silt and clays in their place.

The actions of the glaciers and the ten thousand years of rock weathering since their retreat has created three types of soils in the park. These types are nutrient-poor upland soils derived from weathering-resistant granite and schist; rich lowland soils of lacustrine clay in areas that were inundated by glacial lakes; and organic soils in areas where peat has been able to form.

All of the properties treated in this Environmental Assessment are located on lakeshores. With the exception of the Sugarbush Camp and Hoist Bay, these properties occupy areas of exposed schist, migmatite, and granite. Soils in these areas were derived from weathering of nutrient poor rocks and the decomposition of nutrient poor pine and spruce litter.

Soils at the Finstad, Rice/Gruner, Garrett, Couture/Shermoen, Fujita, Kaukola, Indiana Northwoods, and Levin properties underlie white and red pine communities. Soils in these communities are generally well drained, shallow (3-10 cm) loams and sandy loams. There is an organic horizon 1-3 cm in depth, comprising a duff layer of undecomposed pine needles (Hop et al. 2001).

Soils at the I.W. Stevens, Mittet, and Casareto properties underlie a mixed pine - hardwood community described by Hop et al. (2001) as a white pine-red pine-aspen-birch forest. This forest type is slightly more mesic than the red and white pine forests. The soils found in these communities range from those found in the red and white pine forests described above to deeper (up to 60 cm), only moderately drained soils.

Soils at the Oveson, Camp Marston, Zollner Outpost, Palmer/Luce, and Ingersoll properties underlie boreal pine rocky woodland communities. Boreal pine woodlands occupy areas where exposed bedrock prevents canopy closure. Exposed bedrock can account for as much as 50% of the substrate at these sites. The soils at these sites occur in patches and are typically very shallow, sandy loams that are rapidly drained (Hop et al. 2001).

Soils at Sugarbush Camp underlie a spruce-fir-aspen forest type (Hop et al. 2001). This community almost always occupies gentle slopes (0-10% grade). Soils underlying this forest type are usually rocky, shallow silt or sandy loams (5-8 cm in depth). Coarse, woody debris is common, usually composed of dead and downed aspen and birch.

Elevations in the park range from 1107 feet (337 meters) at Rainy Lake to over 1312 feet (400 meters) on rock ridges in the eastern half of the park.

Vegetation. Voyageurs occupies a zone of transition between the Great Lakes forests to the south and southeast and true boreal forest to the north. All of the tree species of the central Canadian boreal forest—black and white spruce, jack pine, balsam fir, tamarack, trembling aspen, paper birch, and balsam poplar—are abundant within the park. Trees typical of the Great Lakes forests—red and white pine, basswood, red maple, northern pin oak, large-toothed aspen, and black ash—are also present.

Park staff determined the vegetation community present at the properties treated in this Environmental Assessment by overlaying the properties on the park's vegetation map. The vegetation communities were confirmed by using photos taken of the properties.

The Finstad, Rice/Gruner, Garrett, Couture/Shermoen, Fujita, Kaukola, Indiana Northwoods, and Levin properties occupy white and red pine communities. Hop et al. (2001) characterize these communities as consisting of a canopy of mixed red and white pine and a poorly developed understory. Tall shrubs include red maple (*Acer rubrum*), balsam fir (*Abies balsamea*), and beaked hazel (*Corylus cornuta*). Short shrubs include blueberries (*Vaccinium angustifolium* and *V. myrtilloides*). Non-vascular plants include the red-stemmed moss (*Pleurozium schreberi*) and several mosses in the genus *Dicranum*.

The I.W. Stevens, Mittet, and Casareto properties are located in a mixed pine - hardwood community described by Hop et al. (2001) as a white pine-red pine-aspen-birch forest. The overstory in these communities is composed of red pine, white pine, aspen, and birch. Frequently this community is a fine-scale mosaic consisting of aspen and birch on lower slopes and pines on the rocky slopes above. In addition to the plant species mentioned above for the red and white pine communities, this community can also contain mountain maple (*Acer spicatum*) and juneberry (*Amelanchier spp.*) in the tall shrub layer, and honeysuckles (*Lonicera canadensis* and *Diervilla lonicera*) in the short shrub layer.

There are no plant species Federally listed as Threatened or Endangered under the Endangered Species Act in the park. There are no known plant species listed as state-endangered, state-threatened, or state-special concern, within the properties treated in this Environmental Assessment.

Wildlife. The park supports more than 300 species of vertebrate wildlife (NPS 1999). Birds are the taxon with the greatest diversity, with almost 240 species recorded in the park. Because of the park's location in a broad band of transition between the boreal forest to the north and southern forest types, the area supports the greatest diversity of forest-dwelling neotropical migrants north of Mexico (Green 1995).

The park conducts annual point counts as part of a hemispheric-wide forest breeding bird survey program. These counts are conducted in a variety of habitats. Point count results from 2000 and 2001 detected the following birds in red and white Pine Communities and boreal pine rocky woodland communities: Nashville warbler, Ovenbird, Blackburnian warbler, Red-eyed vireo, Winter wren, Chipping sparrow, Magnolia warbler, Eastern wood-pewee, Hermit thrush, Brown creeper, Blue jay, Black-capped chickadee, White-throated sparrow, and Solitary vireo (Grim and Broschart 2000, 2001).

Voyageurs National Park has documented forty-six species of mammals within its boundary. From 1996 to 2001, the park surveyed and monitored small mammals in several habitats throughout the park. Small mammals frequently observed in red and white pine forests and boreal pine rocky woodlands included the masked shrew (*Sorex cinereus*), the shorttail shrew (*Blarina brevicauda*), the deer mouse (*Peromyscus maniculatus*), and the boreal redback vole (*Clethrionomys gapperi*). Mink (*Mustela vison*) are occasionally seen at rocky areas along the shoreline.

Wildlife species of concern are those listed as threatened or endangered by the U.S. Fish and Wildlife Service and those listed by the Minnesota Department of Natural Resources.

There are no Federally listed endangered species within Voyageurs National Park.

The eastern timber wolf is a Federally listed threatened species within Voyageurs National Park. Wolves within the park often use the lake surfaces to their advantage to kill white-tailed deer. Wolves in the park appear to limit their use of the lake surface to the nighttime hours. Most of the properties treated in this Environmental Assessment are located along summer boat channels or winter snowmobile trails. Exceptions are the Indiana Northwoods property on Little Trout Lake and the Mittet property on Grassy Bay of Sand Point Lake.

The lynx (*Lynx canadensis*) is federally listed as threatened (March 2000). The lynx is a boreal species and is near its southern limit in the park. Lynx have been recently recorded in the Ray/Kabetogama area southwest of the park and in the southern portions of the park. Lynx are extremely sensitive to the presence of humans, and require large home ranges without human disturbance (Heinselman 1996).

The bald eagle is a federally listed threatened species that has been recently proposed for delisting. The park has studied bald eagles since 1973 and has annually tracked the number of nesting territories, nest occupancy and success, and reproduction (Grim and Kallemeyn, 1995). As part of its management strategy, Voyageurs National Park has created one-quarter mile protection areas around known eagle nests. Activities that would be detrimental to the bald eagle,

including the siting of new campsites or the development of visitor destinations, are precluded within these buffer zones. None of the properties treated in this Environmental Assessment occur within one-quarter mile of a bald eagle's nest. Several properties do lie one-half mile or slightly more distant from an eagle's nest. These include the Finstad, Oveson, Couture/Shermoen, Camp Marston, Ingersoll, and I.W. Stevens property.

State-Listed species documented within the park include the common tern (threatened), the lake sturgeon (special concern), white pelican (special concern), and northern bog lemming (special concern). None of these species occur within the project area.

Hydrology. Hydrology is the science that deals with the movement of water through the atmosphere, on the surface of the earth, and through the ground. Thus, we can describe an area's hydrology by characterizing the movement of surface, ground, and atmospheric water in that area.

Without exception, the properties proposed for treatment in this Environmental Assessment are located on the lakeshore. As noted in the Geology and Soils section above, all properties occupy sites of exposed bedrock and pockets of shallow soil. The bedrock is impermeable to infiltration. Hoist Bay and Kettle Falls are the only two properties with surface water resources in addition to the lakes on which the properties are situated. However, at Kettle Falls and Hoist Bay, no actions are proposed near streams, wetlands, or ponds.

Drainage of precipitation at all sites is rapid and is usually by overland flow rather than infiltration. One can find groundwater at depths in excess of 250 feet on the Canadian Shield, but the relationship between these deep aquifers and surface waters has not been established.

Water Quality. A water-quality investigation was conducted on Voyageurs' four large lakes from 1977 to 1984. The results were summarized in Payne (1991) and are also included here:

Waters in the large lakes and embayments met nearly all EPA water quality criteria for protection of fresh-water aquatic life, drinking water, and recreation. Some drinking water criteria were exceeded at some monitoring sites due to elevated concentrations of oil/grease and phenols. Sulfide concentrations in Black Bay on Rainy Lake and Sullivan Bay on Kabetogama Lake exceeded EPA criteria for protection of aquatic life. Ammonia also exceeded EPA criteria for protection of aquatic life in Sullivan Bay. PCB concentrations exceeded EPA criteria for protection of aquatic life at one site in Kabetogama Lake.

Air Quality. Voyageurs National Park was designated a Class I area by the Clean Air Act of 1977, as amended. Park air quality is generally good, although visibility decreased slightly from 1988-1993 during the last period monitored.

Ozone in the park's air increased slightly from 1988-1997, but is still well below the most recent EPA standard.

Air quality is not measured at any of the properties treated in this Environmental Assessment. Two paper mills, one owned by Abitibi in Fort Frances, Ontario and the other by Boise, in International Falls, Minnesota, lie 12 miles west of the park's far eastern boundary. Any air quality impacts from the mills would be greatest in the northeastern part of the park. Both a plume and odor from the plants is noticeable at the Rainy Lake Visitor Center under certain weather conditions (park staff, personal communication 7/99). Further evidence that the Fort Frances/International Falls mills are affecting air quality in the park comes from a study of lichens. Bennett and Wetmore (1997) found that sulfur, mercury, and other airborne pollutants measured in four lichen species (over 3 years) decreased with distance from the mills and then began to increase toward the park, where concentrations were higher than even 3 miles (5 km) from the source.

All properties are located on sections of lakes that receive boat traffic in summer and snowmobile traffic in winter. Emissions from small boat and snowmobile engines have not been measured.

Visual Resources and Noise. As was noted under the description of air quality, all of the properties are exposed to snowmobile and boat traffic. The noise produced by boat and snowmobile engines can be heard for quite some distance from the machines. During the winter, an ice road is plowed from the Rainy Lake Visitor Center to Dove Bay or Cranberry Bay, depending on ice conditions. This road provides vehicle access to ice-fishing areas on Rainy Lake.

The properties in this Environmental Assessment could be considered visual resources, valued both positively and negatively by park visitors. There are 94 structures located on 24 properties, which are located on shorelines throughout the 218,000 acres of the park. Three properties with 21 structures are located in major developed areas. The majority of properties contain one primary structure with one to two secondary structures. Structures are generally small, averaging 508 square feet in size. The two largest complexes outside the developed areas are Monson's Hoist Bay Resort (17 structures) and the I.W. Stevens (9 structures) properties.

Wilderness. In 1992, the National Park Service proposed 127,436 acres (51,572 hectares) of land and small lakes for wilderness designation (NPS 1992). This proposal was forwarded to the Secretary of the Interior, where it awaits further action. National Park Service policy dictates that study areas proposed for wilderness designation be managed as wilderness.

According to National Park Service policy, the National Park Service is not permitted to take any action that might diminish the wilderness suitability of an area recommended for wilderness study or designation. The wilderness proposal for Voyageurs currently excludes all structures, including historic structures, ruins and structural remains that the park plans to maintain.

VISITOR USE AND EXPERIENCE

The water-dominated landscape and the change of seasons greatly influence recreational activities in the park. The most popular summer activities are viewing scenery and wildlife, fishing, photography, hiking, camping and visiting historic sites. Winter use centers on snowmobiling but also includes cross-country skiing, ice fishing and snowshoeing. There are currently 215 day and overnight use sites throughout the park and hiking, skiing and snowshoeing trails. The park provides visitor services and information at the Rainy Lake Visitor Center, Kabetogama Lake Visitor Center, and Ash River Visitor Center with more limited services at the Crane Lake Ranger Station.

Most lodging, food, mainland camping, boat rentals and recreation equipment operators are located outside the park. The historic Kettle Falls Hotel, which is operated through a concession contract, is the only lodging within the park. Boat tours are also provided through a concession operation.

The average annual visitation to the park from 1990-2000 was 244,137 (General Management Plan/Visitor Use and Facilities Plan). 60% of the annual visitation occurs between May and September and the majority of visitors are from the Midwest.

Visitors have a diversity of expectations when they come to the park. Some expect a wilderness setting devoid of development. Others expect a variety of recreational activities including the opportunity to visit historic sites. Many visitors are independent and content to fish, camp and explore the park on their own. Others rely on park facilities, programs, and destinations for a meaningful experience.

Some historic properties are particularly important to local residents, summer residents and longtime visitors. Communities surrounding the park are also interested in the potential of the development of historic places for heritage tourism.

SOCIAL AND ECONOMIC ENVIRONMENT

Voyageurs is within Minnesota's Arrowhead Region which includes seven counties in the northeast part of the state. The economic region affected by Voyageurs includes northern Koochiching County and northwestern St. Louis County. Wood products and tourism are the dominant economic factors.

The population of Koochiching County has declined since 1960 and is currently 14,355 (U.S. Bureau of the Census 2001). The population of St. Louis County is 200,528 with the majority of the population in the Duluth area. Tourism is an important and growing part of the economy of northeastern Minnesota. Resort communities surrounding the park provide important services for guests and visitors and serve as gateways for visitors going into the park.

PARK OPERATIONS

Park headquarters is in International Falls where the majority of permanent employees work. The park has two operational districts, the Rainy District and the Namakan District, where most other employees work. Funding and staffing, both full-time and seasonal has decreased over the past 15 years, particularly in visitor protection and interpretation. Due to staffing limitations, maintenance activities have been reduced and the park does not have a comprehensive preventative maintenance program.

The park has been maintaining some historic properties at a minimal level to keep them in stable condition until treatment funds become available and decisions are made on ultimate treatment. More significant funding has been received for rehabilitation of some properties. Funding for treatment such as rehabilitation, stabilization or cyclic maintenance is primarily dependent on competing for National Park Service project funds. Between 1990 and 2001, the park received approximately \$700,000 for treatment of historic structures. Rehabilitation of the Rainy Lake City Saloon, the Kettle Falls Damtender's Cabin, Meadwood Lodge, the Kabetogama Ranger Station and the Ellsworth Rock Garden was completed with these funds. In addition, some repairs were made to structures at Hoist Bay, I.W. Stevens, Camp Marston, Harry Oveson Fish Camp, and the Ingersoll Estate.

Routine maintenance is accomplished with park operating funds. The cost of maintaining facilities is higher in Voyageurs than many other areas because the most facilities are accessible only by water and are scattered over a large geographic area. The short construction season also makes it difficult to accomplish many projects in a year. Remote properties are also highly vulnerable to vandalism. Current staffing levels only permit infrequent monitoring and routine maintenance of historic properties.

The primary seasonal housing area is located in the Namakan District at Whispering Pines. There is no employee housing in the Rainy District. Park housing does not meet present needs.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES/IMPACTS

INTRODUCTION

This section presents the probable environmental effects or consequences of implementing a historic structures management plan for the park. It also presents the scientific and analytical basis for the comparison of alternatives.

In accordance with the National Environmental Policy Act, evaluation of environmental effects requires consideration of the intensity, duration, and cumulative effects as well as a description of measures to mitigate adverse effects.

Section 106 of the National Historic Preservation Act requires Federal agencies to consider the effects of their projects and plans on historic properties. A historic property is any district, site, building, structure or object that is included in or eligible for the National Register of Historic Places. The purpose of Section 106 is to encourage agencies to recognize the importance of historic properties to communities and to seek ways to avoid or minimize damage.

An adverse effect on cultural resources occurs when an undertaking directly or indirectly alters a property's historic integrity and the characteristics that qualify the property for inclusion on the National Register. Integrity is the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during its historic period.

Examples of adverse effects on historic properties include: physical destruction or damage; alterations not consistent with the Secretary of the Interior's Standards; relocation of a property, change of use or physical features of a property's setting; visual, atmospheric, or audible intrusions; neglect resulting in deterioration; or transfer, lease, or sale of a property out of Federal ownership or control without adequate protections.

A determination of potential impairment of resources is also required under National Park Service Management Policies (2001). While Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired for the future. An impact may be considered impairment if the resource or value is:

- necessary to fulfill specific purposes identified in the park's enabling legislation;
- key to the natural or cultural integrity of a park or to opportunities for enjoyment; or

- identified as a goal in the park's General Management Plan or other planning documents.

Additionally, criteria for determining impairment to historic properties have been drafted by a National Park Service task force (03/15/01). The task force identified the following considerations for impairment:

- Are affected properties identified in park authorizing legislation; or
- Are affected properties identified as preservation priorities in park planning studies; or
- Are affected properties nationally significant; or
- Do affected properties evidence exceptional significance in representing either:
 - Historical park development; or
 - Patterns of local or regional prehistory or history?

Further explanation of environmental effects and impairment, definitions for terms used during the analysis and Section 106 regulations are provided in Appendix E of this plan, Director's Order-12 (DO-12: Conservation Planning and Environmental Impact Analysis) and Director's Order-55 (DO-55 Interpreting the National Park Service Organic Act).

CULTURAL RESOURCES

Each of the alternatives proposes removal of some historic structures and in some alternatives, entire properties are proposed for removal. Removal of a historic structure is an adverse effect. Mitigation of these adverse effects is integral to each alternative and has been determined in consultation with the State Historic Preservation Office. Mitigation includes actions that limit or compensate for the damage an activity does to a historic property.

Mitigating Measures

- All historic properties will be physically surveyed for archeological remains by professional archeologists in accordance with applicable National Park Service policies, guidelines and standards.
- Treatment plans will be developed for the use, interpretation, preservation, and/or rehabilitation of historic properties in accordance with the Secretary of the Interior's Standards for Treatment of Historic Properties. Treatment plans will be subject to Section 106 review.
- Vandalism will be mitigated by appropriate signing and security measures.
- Foundations or other structural remains will be left in place as an indicator of habitation where properties are removed.
- The National Park Service will prepare a publication interpreting the history of the park that will serve as a guide to historic properties.

- Before a structure eligible for the National Register can be removed, documentation recording it must be prepared in accordance with Section 110(b) of the National Historic Preservation Act and the documentation submitted to the State Historic Preservation Office.

No Action

The majority of historic properties (20 of 24) would not be maintained and would be lost over time through deterioration. Visitors would not have the opportunity to visit most historic sites in the park.

Conclusion: This alternative would result in an adverse effect for twenty historic properties.

Impairment: An assessment of impairment would need to be made if this alternative is selected. The status of historic recreation properties as possible exceptionally significant examples of local and regional patterns of history would need to be clarified to consider the potential for impairment.

When the park was established, 386 properties related to recreation existed. To date, 194 have been removed, 172 non-historic recreational properties are scheduled for removal and twenty have been determined historic. The No Action alternative would result in the removal of all but two historic recreation properties (Kettle Falls and Meadwood Resort). This is far less than the target historic properties number recommended for preservation in the park's General Management Plan/Visitor Use and Facilities Plan.

Alternative 1: Emphasis on Individual Properties

Twenty of twenty-four properties would be preserved under Alternative 1. Alternative 1 preserves a large number of properties and a high degree of integrity for individual properties, but all themes would not be well represented. For example, all three sporting clubs/camps would be preserved but only three of six mid-period recreational cabins would be retained.

Alternative 1 proposes finding alternative public uses for ten historic properties (excluding residential use). There is significant opposition by long-time seasonal residents who have or will have to vacate property, to allowing other people to occupy or use cabins in the park. If successful agreements could be reached with partners or sponsors for a compatible, public use of historic properties, the cost of maintenance for the park would be less and the properties would benefit from a more constant presence. However, it may be difficult to find partners and/or find uses that would enhance but not compete with area businesses or that would not be opposed by former residents or that would provide general public access. Managing agreements could also add an administrative burden to the park.

Conclusion: This alternative would result in removal of four historic properties (Couture, Casareto, Finstad, I.W. Stevens), which would be considered an adverse effect for those properties.

Impairment: No impairment of cultural resources would occur with this alternative.

Alternative 2: Emphasis on Landscape View

Alternative 2 recognizes that historic properties represent different themes in history. It proposes that the collection of properties representing these themes is more important than the wholeness of individual properties. With this alternative, visitors would have the opportunity to gain a broad perspective of history and learn about not only the well-known properties but lesser known ones as well. Individual sites would be compromised by the removal of some buildings but properties would retain their historic integrity. With this alternative, all properties would be preserved (24 of 24) but 56 of 94 buildings would be retained.

This alternative is dependent on park funding, however a small amount of income would be generated through rental for park housing and short-term housing for the Volunteer-In-Parks program. There may be potential for grant funds to support the Artist-in-Residence program and the maintenance of properties used for that purpose.

Alternative 2 provides for a diverse palette of uses and is less dependent on one use. Use of historic buildings as day use shelters could compromise their condition with potentially hard, repeated use by campers. There would be varying degrees of accessibility by the public depending on the use and the level of development. Large properties that are highly visible on the shoreline would have fewer structures but be less conspicuous on the shoreline for visitors who seek a more natural landscape experience.

Conclusion: This alternative would result in preservation of 24 properties with retention of core buildings and removal of other structures.

Impairment: There would be no impairment of cultural resources with this alternative.

Alternative 3: Emphasis on Best-Known Properties

Alternative 3 proposes preserving highly visible properties and those that are well known to local permanent and seasonal communities. This alternative would result in retention of fourteen of twenty-four properties. These fourteen properties would retain a high degree of integrity and probably benefit from a

higher maintenance standard due to the proximity to maintenance hubs and use as major visitor destinations.

However, this proposal would result in removal of ten historic properties. Although this loss could be mitigated, visitors would be presented with a skewed version of history. Ten recreational properties would be preserved, four of which are resorts, although visitors would have the opportunity to learn an in depth story at each site.

Conclusion: This alternative would result in preservation of 14 of 24 properties with 70 structures. An adverse effect would occur for the removal of ten historic properties (Mittet, Palmer/Luce, Rice/Gruner, Jr. Island/Brown, Couture, Casareto, Finstad, Indiana Northwoods, Zollner, Sugarbush).

Impairment: This alternative would result in removal of half of the historic recreation cabins. However, an example from each period would be preserved, therefore no impairment of cultural resources would occur with this alternative.

Alternative 4: Emphasis on Interpretive Stories (Preferred)

Alternative 4 proposes retaining properties that represent an example of each cultural theme but removing 44 structures at those properties.

It considers privately owned historic properties as resources for the future that would be preserved in place of those proposed for removal under this alternative. Privately owned property is usually acquired when there is a willing seller and when funds are available for acquisition. There is a certain amount of risk that privately owned historic property would not retain integrity through time or be in good condition when acquired.

Alternative 4 provides visitor access to the majority of properties, but the level of accessibility would vary depending on the ability of the property to withstand development and heavy visitor use. A variety of media would be used as an alternative to preservation of some properties, which would broaden the ability to tell the story of the property but may not take the place of being able to visit the property.

Alternative 4 is dependent on one use—interpretation. While this is an appropriate and desired use, the introduction of new facilities and heavy visitation could impact some sites. Buildings would be unoccupied and may continue to be vulnerable to vandalism despite the fact that they are presented as valuable resources.

Conclusion: This alternative would result in immediate preservation of 16 historic properties with 50 structures, with potential for 4 additional properties in

the future. An adverse effect would occur for the removal of Couture/Shermoen, Sugarbush Camp, Palmer/Luce, and the Indiana Northwoods Club.

Impairment: There would be no impairment of cultural resources with this alternative.

NATURAL RESOURCES

Scope of Impacts Considered

This section of the Environmental Assessment assesses primarily the impacts to natural resources from building removal proposed under each alternative. The impacts of future development are not considered, since these have either been considered in prior documents or will be considered in future documents. For example, the Lakecountry and Backcountry Site Management Plan and Environmental Assessment (1988) evaluated the impacts of campsite construction on the park's resources. Similarly, the effects of development at Rainy Lake City were considered in the Rainy Lake City Environmental Assessment. The effects of development at the Levin Cabin, Meadwood Lodge and the Kabetogama Ranger Station Historic District are considered in the Environmental Assessment for Ash River and Kabetogama Developed Areas. The effects of development of interpretive facilities at historic properties not currently utilized for interpretation will be considered in a future Environmental Assessment for visitor destinations.

Consideration of Impacts of Building Removal

The magnitude of impacts to natural resources will depend upon the size of the removal operation. For the purposes of assessing impacts, we divided removal operations into three categories:

Light removal project: Only a small outbuilding would be removed. Work would generally be done by hand. The project footprint would be less than 500 square feet where workers were disassembling the building.

Medium removal project: Only one large (more than 500 square feet) building would be removed. A bobcat and six-wheeler with trailer may be used to assist with demolition and removal of materials. The vehicles will be limited to within a fifty-foot perimeter of the building. The project footprint would be one-quarter acre or less.

Large removal project: Two or more large (500 square feet or more) buildings would be removed. This would necessitate the use of a bobcat and six-wheeler with trailer at more than one location on the property. While vehicles would be restricted to a space within 50 feet of the buildings, because there are two or

more buildings, there would be traffic between the different structures. Project footprint may be greater than a quarter acre but would be less than one acre.

At all properties, if a suitable place exists to locate a burn pile, safely burnable materials (wood, paper) would be separated from the remains of the structure and burned. Materials containing or coated with toxic materials would not be burned.

Under Alternative 1, one property is proposed for a light removal project, two are proposed for a medium removal project, and three are proposed for a heavy removal project.

Under Alternative 2, four properties are proposed for a light removal project, three are proposed for medium removal projects, and two are proposed for heavy removal projects.

Under Alternative 3, one property is proposed for a light removal project, twelve are proposed for medium removal projects, and two are proposed for heavy removal projects.

Under Alternative 4, one property is proposed for a light removal project, four are proposed for medium removal projects and three are proposed for heavy removal projects.

Building removal projects take anywhere from one to five working days over a seven to ten day period.

At places where it is possible to do so in this Environmental Consequences section, impacts will be quantitatively described. In many cases this is not possible. For cases in which it is not possible to quantify natural resource impacts, the following qualitative descriptions will be used:

Intensity of Impact

Major - substantial, highly noticeable influence on the resource; impacts would be measurable if resources were sufficient to measure them, or impact covers a large area (greater than one acre).

Moderate - influence on the resource noticeable to both lay public and technical experts, but influence not substantial, or impact covers a moderate area (less than one-quarter acre).

Minor - influence on the resource may be noticeable under close inspection to technical experts, but is probably undetectable to the lay public, or impact covers a minor area (less than 2000 square feet).

Negligible - influence on the resource is barely perceptible to technical experts, and not measurable, or confined to a small area (less than 500 square feet).

Duration of Impact

Permanent - In excess of ten years.

Long-term - One to ten years.

Short-term - 3 months to one year.

Very short-term - less than 3 months.

For the purposes of this Environmental Assessment, the difference between the alternatives with respect to natural resource impacts is one of extent, not duration or intensity. The No Action alternative would impact no locations. Alternative 1 would impact eight locations. Alternative 2 would impact ten locations. Alternative 3 would impact ten locations. Alternative 4 would impact nine locations. This difference of extent should be kept in mind when reading the impacts described below.

Geology and Soils. Alternatives 1, 2, 3 and 4 would each involve the use of six-wheelers and a bobcat for one to five working days during a ten-day period. Most of the properties exhibit exposed rock, which is resistant to any impacts from these vehicles. Most of the properties were used during the past 25 years and have a well-established network of footpaths and cleared vegetation around them. Nonetheless, the use of equipment would result in some additional compaction of the shallow soils at these sites. The area of additional impact will be much smaller than the project footprint, since much of the project footprint was previously disturbed.

Because these soils are shallow, sandy loams, the compaction can only penetrate so deep. The annual freeze and thaw cycle should be sufficient to break up any compaction in these shallow soils within a year or two.

Conclusion: Neither the No Action Alternative nor Alternatives 1, 2, 3 or 4 would adversely affect geological resources or landforms. The No Action Alternative would not affect soils. Alternatives 1, 2, 3 and 4 would have minor effects (due to extent, not intensity) for 1 to 2 years on soils.

Impairment: Alternatives 1, 2, 3, and 4 and the No Action Alternative would not cause impairment to geologic or soil resources.

Vegetation. Under alternatives 1, 2, 3 and 4, trees larger than 2 inches diameter breast height would not be removed unless they presented a hazard to workers.

Any proposed tree removal would require clearance from the park Chief of Natural Resources.

As mentioned above, some of these properties already have an extensive foot print due to previous use. There are well-worn foot trails and areas cleared of vegetation. Nonetheless, use of small vehicles such as rubber-tired six-wheelers and bobcats will cause the trampling of some herbaceous vegetation and small shrubs. Soil compaction could affect the roots of some plants on the properties. But recovery of the herbaceous and short shrub layers should be swift, perhaps in one or two seasons.

In 2000, the National Park Service completed an exotic plant survey at more than 57 sites within the park, including 31 sites formerly occupied by buildings or camps (Northern Bioscience, 2000). The results of this survey indicated that, because of their remote location and because of the presence of a forest canopy at most sites, invasive plants have not successfully invaded properties where buildings have been removed. It is unlikely that invasive plants would have any impact on the properties proposed for treatment in the Historic Structures Management Plan.

Once again, the area of additional impact to vegetation would be much smaller than the project footprint, since much of the project footprint was previously disturbed.

Conclusion: The No Action Alternative would not adversely affect vegetation. Alternatives 1,2, 3 and 4 would have a minor negative effect for 1 to 2 years on vegetation.

Impairment: Alternatives 1, 2, 3, and 4 and the No Action Alternative would not cause impairment to vegetation.

Wildlife. Operating four-stroke vehicles and power saws at building removal sites would disturb wildlife during the one to five days that workers are present.

Presently unoccupied buildings may provide artificial nesting areas for eastern phoebes, tree swallows, or other birds. Small mammals and garter snakes undoubtedly use unoccupied buildings for cover and shelter. These animals would be "evicted" when the buildings are removed. However, the recovery of natural vegetation at these properties will provide additional habitat for wildlife in the long-term.

The extent of impacts to wildlife would be small. Excluding developed areas at Hoist Bay, Rainy Lake City, and the Ash River and Kabetogama Lake Visitor Centers, buildings and their surroundings or foot-print on the remaining twenty properties occupy less than 10 acres total in a park that is 218,054 acres in size. The habitat for animals at these properties is not unique or unusual.

Conclusion: The No Action Alternative would not impact wildlife. Alternatives 1,2, 3 and 4 would have a negligible negative effect on wildlife due to noise for one to five workdays at each property where buildings are removed. Alternatives 1, 2, 3 and 4 would have a negligible, long-term negative effect on animals displaced by the removal of buildings.

Impairment: Alternatives 1, 2, 3 and 4 and the No Action Alternative would not cause impairment to wildlife.

Hydrology. The developed areas at Hoist Bay and Kettle Falls are the only properties possessing surface water--however no actions are proposed near these waters. All of the remaining properties occupy sites of exposed bedrock and very shallow soils, where drainage is by overland flow rather than infiltration. Building removal, because of localized soil compaction, may cause an unnoticeable, insignificant change in drainage.

Conclusion: Alternatives 1,2, 3, and 4 would have negligible impacts on hydrology for 1 to 2 years. The No Action Alternative would not impact hydrology.

Impairment: Alternatives 1, 2, 3, and 4 and the No Action Alternative would not cause impairment to hydrology.

Water Quality. A barge powered by two large two-stroke engines would be used to ferry people, materials, and equipment to and from properties proposed for treatment. Gas and oil from these motors may leak into water. The small quantity of petroleum products that leaks into water should be dispersed within a day by winds and mixing of surface waters. (a two-stroke engine uses 1/3 cup of oil per gallon of fuel. Experts have estimated that 10% of this leaks into the water. Thus a barge using two motors and burning 4 gallons of fuel per hour will leak about 4/30 or about 1/8 of a cup of oil per hour) Loading and unloading of materials and equipment at each property may result in the trampling of some soils and erosion. However, because most sites are rocky and soil depth is extremely shallow, the amount of soil that can contribute to erosion should be extremely limited.

Conclusion: The No Action Alternative would not adversely affect water quality. Alternatives 1,2, 3 and 4 would have negligible, short-term (seven to ten project days plus 1-2 days after) effects on water quality.

Impairment: Alternatives 1, 2, 3 and 4 and the No Action Alternative would not cause impairment to water quality.

Air Quality. Impacts to air quality would include exhaust from gas-powered tools or tractor engines during building removal and compounds released during the burning of plant-fiber based building materials.

Conclusion: Alternatives 1, 2, 3 and 4 would have negligible, short-term (seven to ten days per site) adverse impacts on air quality due to engine exhaust. Alternatives 1, 2, 3 and 4 would have moderate, short-term (one day only) impacts on visitor experience and air quality due to burning of plant-fiber based building materials. The No Action Alternative would not impact air quality.

Impairment: Alternatives 1, 2, 3, and 4 and the No Action Alternative would not impair air quality.

Visual Resources and Noise. The presence and noise of machinery and workers, the unattractive sight of disassembled houses or temporary sorting piles, and the short duration fires to burn safely consumed materials may affect visitor experience.

The presence of historic properties throughout the park may be considered a positive impact by some and negative by others. For some visitors, historic properties are important evidence of human life and experiences and represent the ongoing interaction between people and the environment. Other visitors feel any structures at all compromise the wilderness character of the park. Any decision made with respect to these structures will no doubt negatively impact visual resources for some and positively impact them for others.

Three of 24 properties are located in already developed areas. The majority of other properties are small, discretely placed on the landscape and not very visible to the average visitor. One property, the Zollner Outpost is located in Subarea 3 of the Lakecountry Area and one property, the Indiana Northwoods Club, is located in the Primitive Area (see page 11 for definitions).

Conclusion: The No Action Alternative would not adversely affect visual resources and noise. Alternatives 1, 2, 3 and 4 would have moderate, short-term (seven to ten project days) effects on visual resource and noise.

Impairment: Alternatives 1, 2, 3, and 4 and the No Action Alternative would not impair visual resources and noise.

Wilderness. All structures, including historic structures, ruins and structural remains that the park plans to maintain, interpret or place under use agreements, are **excluded** from proposed wilderness. They cannot be included in wilderness until structures are removed. Evaluation of historic properties had not been completed when the wilderness recommendation was prepared. Since the wilderness proposal was made, four properties located outside proposed wilderness have been determined historic and eight located within proposed

wilderness have been determined to be non-historic and will be removed. Currently, twenty historic properties lie outside of Voyageurs 127,000 acres of proposed wilderness. The remaining four properties (Couture/Shermoen, Palmer/Luce, Finstad, Casareto) were included in the wilderness proposal as potential additions to wilderness once "...the land had been purchased from the government, use-and-occupancy leases had expired, structures or structural debris had been removed or the structures had moldered to a significant degree..." (NPS, 1992).

Alternative 1 proposes adding two properties to the area considered as proposed wilderness. Alternative 2 proposes adding four properties to proposed wilderness. Alternative 3 proposes adding one property to proposed wilderness. Alternative 4 proposes adding one property to proposed wilderness. The No Action alternative would add no properties to proposed wilderness.

Conclusion: The No Action Alternative would not adversely affect wilderness. Alternatives 1, 2, 3 and 4 would have minor, long-term positive effects on wilderness.

There would be no impairment of wilderness resources under Alternatives 1, 2, 3, and 4 or the No Action Alternative.

Threatened and Endangered Species Determination. There are no Federally listed endangered species in the project area. Federally listed threatened species in the park, including the eastern timber wolf and perhaps the Canada lynx, are not likely to use any of the properties regularly because of their small size and proximity to boating and snowmobiling routes.

In 2001, sixty-six bald eagle nests were observed in the park. The park has established one-quarter mile protection areas around bald eagle nests. New construction, and visitor or administrative activities are prohibited within this area from the period of incubation until fledging. None of the subject properties lie within one-quarter mile of a bald eagle nest.

There are no State-listed threatened or endangered species in the project area.

Endangered Species Determination: Alternatives 1, 2, 3 and 4 and the No Action Alternative are not likely to adversely affect Threatened and Endangered Species.

VISITOR USE AND EXPERIENCE

Public comment during preparation of the park's General Management Plan/Visitor Use and Facilities Plan indicated a desire for more visitor opportunities including historic areas to visit. All action alternatives provide additional visitor destinations, although proposed uses for alternative 1 may limit

visitation to some sites. Alternative 2 provides for a variety of visitor uses including visitor destinations, artist-in-residence camps, and campsite shelters. Campsite shelters would offer a type of camping opportunity for visitors who are inexperienced campers or don't have camping equipment. Two of the campsite locations are proposed houseboat sites. A vault toilet would be installed at these locations, which is a departure from standards established in the park's Lakecountry and Backcountry Site Management Plan.

Alternative 3 focuses primarily on developing historic properties as visitor destinations but would be more limited in its representation of area history. Alternative 4 provides public access to the majority of properties, although the scale of development would be different at visitor destinations than at discovery sites, and proposes a variety of media to interpret sites. People would have the opportunity to learn about historic properties without visiting the park. The No Action alternative would not increase visitor opportunities to historic areas.

The removal of structures under all alternatives would have a minor, short-term effect on visitor experience during the period that structures were being removed. The sight of building removal might dismay visitors and the noise of building removal may disturb some visitors.

SOCIAL AND ECONOMIC ENVIRONMENT

All action alternatives would provide some additional visitor destinations that could contribute to heritage tourism activities that are being developed by tourism groups in northeastern Minnesota and by the state. Alternatives 3 and 4 would provide the most opportunities. The No Action alternative would not increase heritage tourism efforts.

Alternatives 1 and 2 propose actions that would allow non-profit groups or other partners to use cabins recently occupied under use and occupancy reservation. Broader public uses, such as those proposed under alternatives 3 and 4, may be more acceptable to former occupants and provide an opportunity to educate park visitors about the history of the properties and what former occupants relinquished to create a national park.

PARK OPERATIONS

Adequate funding for historic structures is a Servicewide problem. The estimated cost of repair and maintenance of over 25,000 historic structures at 384 National Park Service areas is over 1 billion dollars. Voyageurs currently has a project backlog of over \$25 million of which \$4 million is needed for cultural resources. Several historic properties are in extremely poor condition and require major work to even bring them to a maintainable condition.

The costs for each alternative are compared using preservation treatment, routine and cyclic maintenance, site planning and development, interpretation, building removal and administration. The No Action alternative would result in no additional operational costs in routine and cyclic maintenance and limited costs associated with site development and interpretation. The cost of building removal would be the largest of all alternatives, however it is non-recurring. Routine maintenance costs are comparable across all action alternatives. Cyclic maintenance and preservation treatment costs are higher in Alternative 1, however site development and interpretation are the lowest of all alternatives. The initial costs for treatment, site development and interpretation are the highest for Alternative 3, but these are generally one-time costs. Considering the action alternatives only, Alternative 4 is overall the most economical and operationally achievable.

CUMULATIVE EFFECTS

"Cumulative actions are those that have additive effects on a particular environmental resource. It is irrelevant who takes these actions or whether they took place in the past, are taking place in the present, or will take place in the reasonably foreseeable future" (National Park Service Director's Order 12 Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making).

Past Actions

Voyageurs National Park has been a cultural landscape since just after the retreat of the Pleistocene glaciers 11,500 years ago. We do not have evidence about how people shaped the landscape prior to about 4000 years ago. About 4000 years ago, lake sediments show a dramatic increase in charcoal. This charcoal indicates frequent and widespread fires. Some researchers have hypothesized that this increase in fire frequency was due to the burning and management of wetlands and dry rocky areas by American Indians to promote the regeneration of berries.

Logging began in earnest in the park in the 1870s and 1880s. By 1929, timber companies had cut much of the standing white pine, red pine, and white spruce. Studies by Kurmis et. al. (1978, 1979, 1980) have shown that most of the pine in the park exists because it was too young to be harvested for timber in the early 20th century.

Droughts in the early 1920s and mid-1930s created ideal conditions for catastrophic wildfires that consumed thousands of acres on the Kabetogama peninsula in 1923 and 1936.

The introduction of affordable automobiles and the completion of a highway from Duluth to International Falls in 1923 were the events that began to bring tourists,

artists, and summer residents to the area that is now the park. Tourism started modestly in the early part of the 20th century, then intensified after World War II.

In 1975, Voyageurs National Park was established. One of the park's first actions was to purchase many of the resorts and private residences within its boundaries. Although the National Park Service assumed some of these properties at the time of sale, many were left in the care of owners under a limited use and occupancy reservation or lease. Many of these leases were twenty-five years in duration. More than 65 of these leases will expire by 2004.

Once the National Park Service acquires a property that is not of historic significance and is not of use to the government (at the time of sale or after a lease expires), it removes all structures and allows native vegetation to recolonize the site. Thus far, the National Park Service has removed more than 400 structures and 200 docks at over 200 properties. In the next five years, the park will remove more than 140 structures and 65 docks at more than 65 properties.

In 1975, the park began building or rehabilitating campsites, day use sites, and houseboat sites. In 2002, these sites numbered 215. The park has constructed docks at 30 of these sites. Voyageurs' 2002 General Management Plan calls for between 65 and 105 additional sites. The park intends to build docks at 28 of these additional sites.

These past events create the context in which we must consider the impacts of the actions proposed in this environmental assessment.

The properties considered in this plan host, in most cases, a small cabin, privy, between one and three outbuildings, docks, and a network of footpaths connecting docks, cabin, and outbuildings. A few properties have small gardens containing exotic species. A survey by Harris and Foster (2000) showed that these plants were not invasive.

Some of the properties that are maintained would be developed as visitor destinations and would be visited occasionally by tour boats on guided tours. The increase in foot traffic at these places may result in trampling of vegetation and some soil compaction. The National Park Service would monitor the landscape at historic sites and take action to limit or channel foot traffic if it proves destructive to the natural or cultural character of the site.

The additional impacts to natural resources, both positive and negative, of the actions proposed in this document, are insignificant when considered in light of the park's existing efforts to remove non-historic structures.

The impacts to cultural resources would be positive for properties that would be preserved and interpreted. Increased awareness of resource preservation

through interpretation and a routine program of preservation maintenance would ensure the long-term survival of historic properties. Development of properties as visitor destinations may increase wear and tear on structures over time however use would be monitored and regulated to prevent both immediate and long-term damage.

Conclusion: No significant cumulative effects are anticipated.

Impairment: None of the alternatives proposed in this assessment, considered in addition to past and future actions, would impair natural or cultural resources within Voyageurs National Park.

CHAPTER 5: RELEVANT LAWS AND POLICIES

National Historic Preservation Act

The National Historic Preservation Act of 1966 (amended 1980) established a comprehensive, nationwide program to preserve significant cultural resources. Two sections directly affect management of historic properties in parks. Section 106 requires that federal agencies take into account the effects of their actions on properties listed or eligible for listing in the National Register and give the Advisory Council on Historic Preservation an opportunity to comment. The regulation also emphasizes participation by State Historic Preservation Officers and the public, including American Indian groups. Section 106 does not mandate preservation but requires agencies to assume responsibility for the consequences of their actions and to be publicly accountable for decisions.

Section 110 directs federal agencies to identify, evaluate, protect, and nominate eligible properties to the National Register. This applies to all units within the NPS regardless of park-specific legislation or whether or not they were established for their natural or recreational resources.

The Advisory Council was informed of proposed revisions to the 1990 Historic Structures Plan on August 22, 2000. Discussions with the State Historic Preservation Office have been ongoing since 1996.

All of the alternatives propose removal of some historic properties which is an adverse effect for those properties. The National Park Service and the State Historic Preservation Office negotiated actions to mitigate these adverse effects. The preferred alternative is in compliance with the National Historic Preservation Act.

Clean Air Act

Section 118 of the Clean Air Act, as amended, requires all federal agencies to comply with federal, state, and local air pollution control laws and regulations. Under the Clean Air Act, federal actions must conform to all applicable state implementation plan requirements and purposes, and these actions must not cause or contribute to any violation. Air quality would not be affected by the alternatives and the recommended alternative is in Compliance with the Clean Air Act.

Clean Water Act of 1972

Section 404 of the Clean Water Act established a federal permit program for dredging and filling within wetlands. The U.S. Army Corps of Engineers administers the program. None of the alternatives prescribed specific actions that would affect water resources. The preferred alternative is in compliance with this act.

Wetlands and Floodplains

Executive Order 11990, Protection of Wetlands (May 24, 1977), requires federal agencies to take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

The State of Minnesota regulates impacts to wetlands by authority of several statutes. The Minnesota Department of Natural resources has requested coordination of any work on historic properties that would occur below or over ordinary high water level. Future development projects, such as construction of facilities for visitor destinations, may be subject to review for compliance.

Threatened and Endangered Species

The U.S. Fish and Wildlife Service has concurred with the National Park Service determination that the alternatives are unlikely to adversely affect any federally listed or proposed threatened or endangered species or adversely modify critical habitat, precluding the need for further action (see attached letter).

Environmental Justice

Executive Orders 12250, 12898, and 12948 require agencies to consider the impact of their actions on disadvantaged human populations. The alternatives presented in this Environmental Assessment would not result in any known effect, positive or negative, specific to any minority or low-income community.

American Indian Religious Freedom Act, 1978

This act declared the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including, but not limited to access to sites, use and possession of sacred objects, and the freedom to workshop through ceremonial and traditional rites. None of the alternatives would limit rights provided under this act.

The park's General Management Plan/Visitor Use and Facilities Plan identified major park issues including management of historic properties. A letter was sent to the Bois Forte Band on October 15, 1998 during the scoping phase of the General Management Plan. This was followed up with a meeting at Nett Lake on January 8, 1999, where a discussion was held about major issues that might affect ethnographic resources. The Bois Forte Band was notified on March 27, 2000 of the opportunity for policy review of the General Management Plan and again on March 27, 2002 during the public comment period.

A meeting was held with the Bois Forte Band on January 31, 2002 on a variety of issues including archeological field inventories of all developed properties in the park, historic and non-historic. The Band supports the inventories, which prevent damage to unknown archeological resources when properties are removed or developed.

CHAPTER 6: COORDINATION AND CONSULTATION

Public Involvement. A scoping letter and press release were distributed on April 30, 2001 to 58 government, tribal and private recipients. Nine written responses were received. The issues that were identified during scoping are listed on page 15.

List of Persons Consulted

Dennis Gimmestad, Government Review and Compliance Officer, State Historic Preservation Office
Gary Donald, Chair, Bois Forte Band
Bill Harlow, Historical Architect, NPS Midwest Region
Marla McEnaney, Cultural Landscape Architect, NPS Midwest Region
Don Stevens, Senior Historian, NPS Midwest Region
Mike Madell, (former) Environmental Coordinator, NPS Midwest Region
Sue Jennings, (current) Environmental Coordinator, NPS Midwest Region
Jeff Richner, Supervisory Archeologist, NPS Midwest Archeological Center
Dan Stinnett, Field Supervisor, Twin Cities Field Office, U.S. Fish and Wildlife Service

Primary Preparers

Mary Graves
Cultural Resource Specialist
Voyageurs National Park (21 years)
B.A., Anthropology/Sociology, Southwest State University
26 years experience in archeology, museum collections, and history

David Szymanski
Biologist, Education Specialist
Voyageurs National Park (4 years)
M.S., Ecology, Duke University
B.A., English Literature (Engineering Science Minor), University of Michigan, Ann Arbor
Eleven years experience in biological research, inventory, and monitoring and resources planning.

Voyageurs National Park Interdisciplinary Environmental Review Team

Roger Andrascik, (former) Chief of Resource Management, Team Leader
David Szymanski, Biologist/Education Specialist
Mary Graves, Cultural Resource Specialist
Rita Sims, (former) Administrative Officer
Kathleen Przybylski, Chief of Interpretation
Raoul Lufbery, Chief of Maintenance
Jim Schaberl, Resource Management Specialist/Research Coordinator
John Snyder, Cartographic Technician

List of Recipients of this Environmental Assessment

Senator Mark Dayton
Senator Paul Wellstone
Representative James Oberstar
Koochiching County Board of Commissioners
St. Louis County Board of Commissioners
MDNR Waters Division
U.S. Fish and Wildlife Service, Twin Cities Office
State Historic Preservation Office
Advisory Council on Historic Preservation
Bois Forte Band
Arrowhead Regional Development Commission
Lake States Interpretive Association
Ash River Commercial Club
Kabetogama Lake Association
Minnesota Office of Tourism
National Parks and Conservation Association

Voyageurs Region National Park Association
Friends of Voyageurs National Park
International Falls Convention and Visitors Bureau
North Star Chapter of Sierra Club
Preservation Alliance of Minnesota
National Trust for Historic Preservation
Koochiching County Historical Society
St. Louis County Historical Society
The Timberjay
St. Paul Pioneer Press
Minneapolis Star-Tribune
Duluth News-Tribune
International Falls Daily Journal
Kettle Falls Hotel
Sight-Sea-Er Boat Tours
Judy DeMarrais
Occupants of Historic Properties under Use and Occupancy Reservation
Members of Hoist Bay Reuse Study Team

CHAPTER 7: REFERENCES CONSULTED

Bennett, James P. and C.M. Wetmore, "Chemical Element Concentrations in Four Lichens on a Transect Entering Voyageurs National Park," *Environmental and Experimental Botany* 37:173-85, 1997.

Connor, Melissa, "Archeological Investigations at Voyageurs National Park," National Park Service, Midwest Archeological Center, 1984.

Franklin, Rachel, "National Register Nomination for Kabetogama Ranger Station Historic District," Midwest Regional Office, Omaha, 1992

Green, Janet, "Birds and Forests, A Management and Conservation Guide," Minnesota Department of Natural Resources, 1995.

Grim and Broschart, unpublished breeding bird survey forms, Voyageurs National Park, 2000, 2001.

Grim, Leland H. and L.W. Kallemeyn, "Reproduction and Distribution of Bald Eagles in Voyageurs National Park, Minnesota 1973-1993," Biological Science Report 1, National Biological Service Technical Report Series, 1995.

Hackett, John and Liza Nagle, "Survey of Historical Structures, Voyageurs National Park," Minnesota Historical Society, St. Paul, 1975.

Hackett, John and Liza Nagle, "National Register Nomination for Ellsworth Rock Garden," Minnesota Historical Society, St. Paul, 1976.

Harlow, William S. and Mary Graves, "Historic Structures Report, Rainy Lake City Saloon," Voyageurs National Park, 1998.

Hop et al., "Project Report, USGS-NPS Vegetation Mapping Project, Voyageurs National Park, February 2001.

Hurley, John, "National Register Nomination for the Ingersoll Estate," Voyageurs National Park (Draft 1995).

Kurmis, V., L.C. Merriam Jr., M. Grafstrom, and J. Kirwan, "Primary Plant Communities, Voyageurs National Park." Report No. 1, CX-6000-7-R020, College of Forestry, University of Minnesota, St. Paul, 1978.

Kurmis, V., L.C. Merriam, N. Aaseng, and B. Kulpan, "Primary Plant Communities, Voyageurs National Park." Report No. 2, CX-6000-7-R020, College of Forestry, University of Minnesota, St. Paul, 1979.

Kurmis, V., L.C. Merriam, N. Aaseng, and S. Webb, "Primary Plant Communities, Voyageurs National Park." Report No. 3, CX-6000-7-R020, College of Forestry, University of Minnesota, St. Paul, 1980.

Lynott, Mark, Jeffrey J. Richner, and Mona Thompson, "Archeological Investigations at Voyageurs National Park, 1979 and 1980," National Park Service, Midwest Archeological Center, 1986.

McEnaney, Marla and Mary Graves, "Preservation Treatment Plan for Ellsworth Rock Garden," National Park Service, Midwest Regional Office and Voyageurs National Park, March 1998

National Park Service, "Lakecountry and Backcountry Site Management Plan," Voyageurs National Park, 1988.

National Park Service, "Environmental Impact Statement, General Management Plan/Visitor Use and Facilities Plan, Voyageurs National Park," Volume 1, August 2001.

National Park Service, "Final Environmental Impact Statement for a Wilderness Recommendation, Voyageurs National Park," Denver Service Center, 1992.

National Park Service, "Potential Flora, Voyageurs National Park," Northern Bioscience, 2002.

Ojakangas and Matsch, Minnesota Geology, University of Minnesota Press, Minneapolis, 1982.

Payne, Gregory A., "Water Quality of Lakes and Streams in Voyageurs National Park, Northern Minnesota, 1977-1984," U.S. Geological Survey, Water Resources Investigations Report 88-4016, St. Paul, 1991.

Quinn Evans/Architects, "Historic Structures Report: Ash River Cabins," Ann Arbor, (Draft 1999)

Richner, Jeffrey J., "People of the Thick Fur Woods: Two Hundred Years of Bois Forte Chippewa Occupation of the Voyageurs National Park Area," National Park Service, Midwest Archeological Center, (Draft 2002).

Sanford, Dena, "Historic Context for Tourism and Recreational Development in the Minnesota Northern Border Lakes from the 1880s through the 1950s," National Park Service, Midwest Regional Office, Omaha, 1999.

Slakey, Anne, "Minnesota's Lakeshore Leasing Program or Forestry Redefined," Voyageurs National Park, 1993.

Stoffle, Richard, et al., "Traditional Ojibway Resources in the Western Great Lakes: An Ethnographic Inventory in the States of Michigan, Minnesota, and Wisconsin," University of Arizona in Tucson, (Draft 1999).

Swain, A.M., "A History of Fire and Vegetation in Northeastern Minnesota as Recorded in Lake Sediments," *Quat. Res.* 3: 383-396, 1973.

Van Horn, Larry, "Special History Study: Commercial Fishing," Denver Service Center, Denver (Draft 1986)

Wright, H.E., Jr., "The Roles of Pine and Spruce in the Forest History of Minnesota and Adjacent Areas," *Ecology* 49(5): 937-955, 1968.