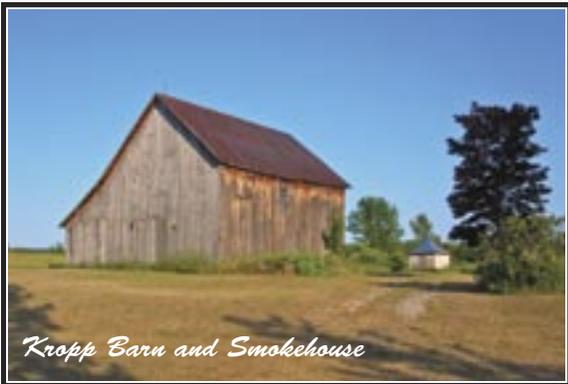


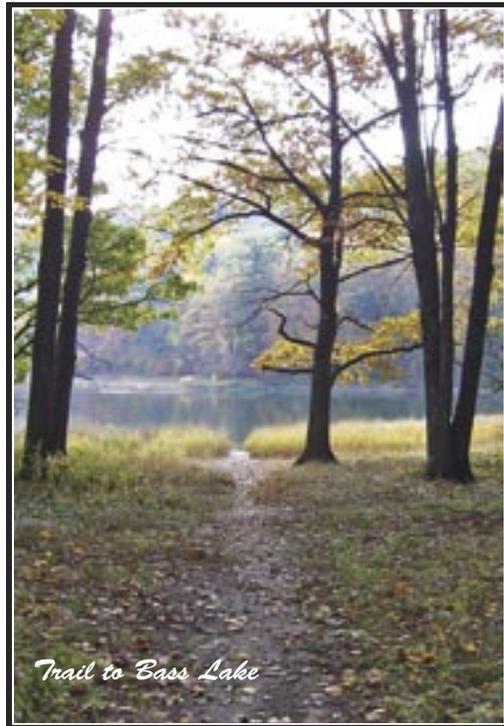
# Introduction



*Lake Michigan Overlook*



*Kropp Barn and Smokehouse*



*Trail to Bass Lake*

## A GUIDE TO THIS DOCUMENT

This *Draft General Management Plan / Wilderness Study / Environmental Impact Statement* is organized into six chapters plus appendixes. Each section is described briefly below.

**Chapter 1: Introduction** describes the context for the entire document. It explains why the plan is being prepared and what issues it will address. It provides guidance (e.g., park purpose, significance, fundamental resources and values, special mandates, and servicewide laws and policies) for the alternatives that are being considered. This chapter also describes how this plan relates to other plans and projects.

**Chapter 2: Alternatives, Including the Preferred Alternative**, discusses management zones, user capacity, and the five management alternatives (the focus of this plan). Mitigating measures for minimizing or eliminating impacts of some proposed actions are then described. A section on the environmentally preferred alternative follows. A summary table of the alternatives (table 2) is included in the back pocket. Summary tables of the range of treatments for historic properties (table 3, page 74) and the environmental consequences of implementing the alternatives (table 4, page 76) are also included in this chapter.

**Chapter 3: Wilderness Study and Proposal**, provides background information about wilderness, describes the options analyzed in this *Wilderness Study* (including the preferred option), summarizes public comment on wilderness, and describes the implications of managing lands that are proposed for wilderness.

**Chapter 4: Affected Environment** describes areas and resources that would be affected by actions in the various alternatives—historic resources, natural resources, visitor opportunities and use, wilderness character, regional socioeconomics, and NPS operations. It also includes a discussion of impact topics that were dismissed from detailed analysis.

**Chapter 5: Environmental Consequences** analyzes the impacts of implementing the alternatives. Methods used to assess impacts are outlined at the beginning of the chapter.

**Chapter 6: Consultation and Coordination** describes the history of public and agency coordination during the planning effort; it also lists agencies and organizations who received copies of the document.

The **Appendixes** present supporting information for the document, along with bibliographic references and a list of the planning team and other consultants.

## OVERVIEW OF THE NATIONAL LAKESHORE

Sleeping Bear Dunes National Lakeshore (hereafter referred to as National Lakeshore, Lakeshore, or park) was established by the U.S. Congress in 1970 with the passage of Public Law (PL) 91-479 (see appendix A). Part of the national park system, the National Lakeshore, which consists of a mainland portion plus North Manitou and South Manitou islands (71,291 acres total), is in the northwestern portion of Michigan's Lower Peninsula (see Region map). The mainland portion straddles the dividing line between Benzie and Leelanau Counties. The Manitou Islands, in Leelanau County, are located to the northwest in Lake Michigan, about 7 miles from the nearest mainland shore. The nearest city is Traverse City, Michigan (population 15,000), which is 30 miles east of the Lakeshore. Smaller communities such as Empire, unincorporated Glen Arbor, and the town of Frankfort are nearer to the National Lakeshore.

Named after a complex of coastal sand dunes, the National Lakeshore features white sand beaches, steep bluffs reaching as high as 450 feet above Lake Michigan, thick maple and beech forests, and clear inland lakes. The National Lakeshore's most notable features — the ancient sand dunes — are products of wind, ice, and water action over thousands of years. During the Ice Age, continental glaciers spread southward from Canada, repeatedly burying the Upper Midwest under sheets of ice. These massive glaciers enlarged river valleys, carved out the Great Lake Basins, and left behind conditions promoting the formation of sand dunes. Over the years, prevailing winds blowing across Lake Michigan built beach dunes on low-lying shores and "perched" dunes on high glacial plateaus. Sculpted by the wind, the active

dunes shift and advance over time, sometimes burying trees and creating "ghost forests" of stark, bleached trunks. The high, perched dunes afford spectacular views across Lake Michigan and of other glacially formed landscapes. The contrast between the open, sunny environment of the dunes and the adjacent lush beech-maple forests is striking.

Long before the area became a National Lakeshore, American Indians, lumbermen, merchant sailors, and farmers visited or settled here. Archeological evidence dates back to prehistoric Indians about 3,000 years ago. The Ottawa and Ojibwe migrated to the area in the 17th century to hunt, fish, and collect maple sap. French explorers, fur traders, and missionaries arrived in the mid-1600s. Not long thereafter, other groups settled in the area, and shipping on the Great Lakes increased, along with the region's population and commerce. Vast forests were cleared in the 1880s to supply lumber for construction and fuel for ships that sailed the Great Lakes. In the 1920s, lumbering subsided as the supply of hardwood dwindled. Subsistence homesteads evolved, followed by cash-crop farms and orchards. Visitors to the area found that its pleasant climate and stunning scenery made for a great place to spend leisure time.

Today, a lighthouse and U.S. Life-Saving Service stations, coastal villages, and picturesque farmsteads reflect the National Lakeshore's rich maritime, agricultural, and recreational history. The region surrounding the National Lakeshore is a popular vacation and summer home destination. In recent times the area has undergone considerable growth as homes and support services are built for expanding full-time and summer populations.

## BACKGROUND

Park planning is a decision-making process, and general management planning is the broadest level of decision-making for parks. General management plans (GMPs) are required for all units of the national park system and are intended to establish the future management direction of a park unit. General management planning is the first phase of tiered planning and decision-making for national park system units. It focuses on why the park unit was established (purpose), why it is special (significance, fundamental resources and values), and what resource conditions and visitor experiences should be achieved and maintained (desired future conditions). General management plans look years into the future and consider the park holistically, in its full ecological and cultural context and as part of a surrounding region.

Although a general management plan provides the analysis and justification for future funding, the plan in no way guarantees that money will be forthcoming. Requirements for additional data or legal compliance and competing national park system priorities can delay implementation of actions. Full implementation of a plan may extend many years into the future.

This *General Management Plan / Wilderness Study / Environmental Impact Statement* (GMP/WS/EIS) was developed by an interdisciplinary team in consultation with National Park Service (NPS) offices; tribal, federal, state, and local agencies; other interested parties; and substantial input and participation from the general public.

### PURPOSE AND NEED FOR THE GENERAL MANAGEMENT PLAN

This *General Management Plan* provides comprehensive guidance for perpetuating natural systems, preserving cultural resources,

and providing opportunities for quality visitor experiences at Sleeping Bear Dunes National Lakeshore. Its purpose is to decide how the National Park Service can best fulfill the National Lakeshore's purpose, maintain its significance, and protect its resources unimpaired for the enjoyment of present and future generations.

This *General Management Plan* describes the general path that the National Park Service would follow in managing the National Lakeshore over the next 20 years or more. The plan does not provide specific and detailed answers to every issue facing the park, but rather is a framework to assist NPS managers in making decisions today and in the future. The plan will

- identify and support the National Lakeshore's purpose, significance, and fundamental resources and values
- provide general guidance for how to manage resources and provide for visitor use
- outline a general approach for facilities management, access strategies, and development patterns
- clearly define desired resource conditions and visitor experience opportunities
- ensure that the foundation for decision-making has been developed in consultation with the public and adopted by NPS leadership after sufficient analysis of the benefits, impacts, and economic costs of alternative courses of action

This *General Management Plan* is needed to update the management framework for the National Lakeshore, address changing issues and conditions, and incorporate new resource information. The National Lakeshore's last *General Management Plan* was completed in 1979. The 1979 plan is outdated and does not follow current NPS guidelines for planning elements such as foundation statements,



**Region**  
**Sleeping Bear Dunes National Lakeshore**  
**General Management Plan/Wilderness Study**

U.S. Department of the Interior · National Park Service  
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Back of map

management zones, etc. The Lakeshore started a new *General Management Plan* in 1999. In October 2002 the Department of the Interior instructed the National Park Service to cease work on the plan. At that time, public opposition arose to possible changes in motorized access to key visitor use areas, particularly beaches, that had been identified in the planning alternatives because of the existing wilderness proposal.

In the years following the National Lakeshore's establishment in 1970, most of the 71,291 acres within the National Lakeshore's boundary have come into federal management through the purchase of over 1,500 tracts of private property and land donations from the state of Michigan. Many of these tracts have come into NPS management since the 1979 *General Management Plan* was completed. Acquisition of private lands within the original boundaries of the Lakeshore continues on a willing-seller basis, not only within the Benzie Corridor but throughout the Lakeshore as well. Private development adjacent to and near the National Lakeshore has increased, and this trend has accelerated in recent years. The National Lakeshore faces new management challenges as a result of all these changes.

A 1982 amendment to the National Lakeshore's enabling legislation authorized a boundary revision to include the Bow Lakes and Miller Hill areas. More recently, lands along the Crystal River were added to the National Lakeshore. Acquisition of private lands within these areas continues on a willing-seller basis. This current *General Management Plan* will provide management direction for these new park lands.

Recent investigations have enhanced the National Park Service's understanding of maritime, agricultural, and recreation-related historic resources in the National Lakeshore. Desired conditions and general (conceptual) direction for management of these resources need to be defined.

## PURPOSE AND NEED FOR THE WILDERNESS STUDY

This *Wilderness Study* evaluates lands within Sleeping Bear Dunes National Lakeshore for possible recommendation to Congress for inclusion in the national wilderness preservation system. The *Wilderness Study* is needed because of public interest in developing a proposal that improves upon the 1981 "Wilderness Recommendation." Including the *Wilderness Study* in the *General Management Plan* saves time and money because the two processes have similar environmental compliance and public involvement needs. Wilderness, which can be designated only by Congress, provides for permanent protection of lands in their natural condition that provide outstanding opportunities for solitude or primitive and unconfined recreation.

The 1970 legislation that established Sleeping Bear Dunes National Lakeshore (PL 91-479) required the secretary of the interior to recommend the suitability or unsuitability of lands within the National Lakeshore for preservation as wilderness. The first wilderness study for the National Lakeshore resulted in a 1975 "Wilderness Recommendation." The 1979 *General Management Plan* endorsed most (but not all) findings from the 1975 recommendation. In 1981 a new "Wilderness Recommendation" was prepared to carry forward the wilderness proposal endorsed by the 1979 plan. Although the 1981 recommendation never formally reached Congress, amendments in 1982 (PL 97-361) to the National Lakeshore's enabling legislation stated that the lands identified in the recommendation "shall, until Congress determines otherwise, be administered by the Secretary so as to maintain their presently existing wilderness character . . . ."

The congressional direction that requires the National Park Service to manage lands in the 1981 recommendation to "maintain their presently existing wilderness character" is unusual and has created some dilemmas

regarding management direction. Moreover, despite public outreach efforts by the National Park Service to clarify the wilderness situation at the National Lakeshore, the wilderness issue remains confusing to many members of the public. Taking into

consideration feedback from numerous presentations made in 2004-2005 to members of the public, including park neighbors and various interest groups, the National Park Service concluded that a new wilderness study was warranted.

### Uses and Management in Wilderness

A variety of recreational uses, management actions, and certain facilities are permitted in wilderness areas under the Wilderness Act of 1964 and NPS policies. Among the uses, management actions, and facilities *permitted* in wilderness are the following:

- ⇒ nonmotorized recreational uses (e.g., hiking, picnicking, camping, canoeing)
- ⇒ hunting and fishing
- ⇒ guided interpretive walks and onsite presentations
- ⇒ use of wheelchairs, service animals, and reasonable accommodations for the disabled (e.g., barrier-free trails, accessible campsites)
- ⇒ trails, campsites, toilets, and signs necessary for visitor safety or to protect wilderness resources
- ⇒ emergency actions and equipment necessary to ensure life safety
- ⇒ fire management activities (including fire suppression)
- ⇒ preservation of historic properties eligible for the National Register of Historic Places
- ⇒ uses and facilities for landowners with valid property rights in a wilderness area
- ⇒ scientific activities, research, and monitoring
- ⇒ natural resource management actions such as restoration of extirpated species, controlling invasive exotic species, endangered species management, and protection of air and water quality
- ⇒ certain administrative facilities if necessary to carry out wilderness management objectives (e.g., storage or support structures, ranger station)
- ⇒ Native American religious activities and other actions recognized under treaty-reserved rights

The Wilderness Act also specifically *prohibits* certain uses and developments. Under section 4(d) of the act, the following uses are not permitted in a wilderness:

- ⇒ permanent improvements or human habitation
- ⇒ structures (historic structures are excluded)
- ⇒ permanent and temporary roads
- ⇒ use of motor vehicles and motorized equipment (except for emergency purposes)
- ⇒ landing of aircraft (except for emergency purposes)
- ⇒ other forms of mechanical transport (e.g., bicycles)
- ⇒ commercial enterprises (except for those that are necessary for realizing the recreational or other wilderness purposes of the area, such as guiding and outfitting)

With the exception of permanent roads, the act does recognize that the above uses *may be permitted* if necessary to meet the minimum requirements for the administration of the area as wilderness or for emergency purposes.

In addition to the above prohibitions, NPS policies also *prohibit* some developments such as the following:

- ⇒ new utility lines
- ⇒ permanent equipment caches
- ⇒ site markings or improvements for nonemergency aircraft use
- ⇒ borrow pits (except for small quantity use of borrow material for trails)
- ⇒ new shelters for public use
- ⇒ picnic tables

Wilderness studies typically result in a recommendation to Congress to designate all, some, or none of the lands possessing wilderness character as part of the national wilderness preservation system. Based on the *Wilderness Study* included in this document, the National Park Service anticipates preparing a proposal for such a recommendation to forward to the U.S. Department of the Interior at the conclusion of this planning effort. However, because of the 1982 law, areas proposed as wilderness in the 1981 recommendation will be managed as wilderness until Congress acts on a new wilderness recommendation.

## PLANNING ISSUES AND CONCERNS

### Wilderness

The 1981 “Wilderness Recommendation” that was prepared for Sleeping Bear Dunes National Lakeshore proposed 30,903 acres of wilderness. Of that total acreage, 7,128 acres were “recommended wilderness” and 23,775 acres were “potential wilderness.” (Recommended wilderness refers to lands that immediately qualify for wilderness designation. Potential wilderness refers to lands that have been identified for future designation as wilderness if temporary, nonconforming uses or incompatible conditions are removed or eliminated.) The 1982 amendment to the park’s enabling legislation (PL 97-361) requires that the areas proposed for wilderness in the 1981 recommendation be managed to maintain their wilderness character “until Congress determines otherwise.” NPS management policies also require such management, which has been occurring at Sleeping Bear Dunes for more than 25 years. Public interest in and debate about the 1981 recommendation was renewed in the early 2000s, and that interest continues today. The National Park Service has decided to reconsider the issue of wilderness at Sleeping Bear Dunes National Lakeshore. Thus, the National Park Service needs to determine,

through this new *Wilderness Study*, which areas of the National Lakeshore should be included in a new wilderness proposal. **Because of the 1982 law, areas proposed as wilderness in the 1981 recommendation will be managed as wilderness until Congress acts on a new wilderness recommendation.**

### Access and Management of Roads within the Park

The National Lakeshore is traversed by many different types of roads, including county roads, NPS administrative and public roads, private roads, and state highways. Some roads provide access to Lake Michigan beaches or other park features, while others provide access to private property. There are some roads that do not access any particular feature or property, having formerly served private properties that are no longer present. Some roads are in areas proposed as wilderness in the 1981 “Wilderness Recommendation.” A few roads are NPS-owned and managed, but most road rights-of-way in the park are held by Benzie or Leelanau Counties. The *General Management Plan / Wilderness Study / Environmental Impact Statement* will evaluate how roads support or impact National Lakeshore resources and visitor experiences. This information will: (a) provide management direction for NPS-owned roads, and (b) provide information for the counties to consider in their road management programs. The counties control road rights-of-way in the National Lakeshore, so any decision to close county roads rests with them.

### Protecting Fundamental Resources and Values

The 1979 *General Management Plan* no longer provides an adequate planning foundation for park management. The National Park Service must identify fundamental resources and values (see following “Foundation for

Planning and Management” section) that deserve primary consideration in planning and management for the National Lakeshore and outline strategies to protect those values. Similarly, the National Park Service must identify what visitor opportunities or experiences fit with the purposes and maintain the significance of the National Lakeshore and must develop strategies for supporting or enhancing those opportunities. This might include additional or expanded visitor facilities. To accomplish this, the National Park Service must decide how to manage specific areas of the park (through management zoning) to protect and provide for these different natural, cultural, recreational, and visitor experience values.

### **Benzie Corridor and Crystal Ridge**

The 1970 legislation that established the National Lakeshore authorized the establishment of a scenic southern entrance road to the park. To that end, the park boundary includes a corridor (the Benzie Corridor) on a ridge (Crystal Ridge) between Crystal Lake and Platte Lake. The National Park Service has acquired nearly 100 acres (about 10%) of the lands within the Benzie Corridor since the park was established. Land has become increasingly expensive in this area, however, and development continues to take place, raising questions as to whether acquiring enough land for a scenic southern entrance is still feasible. The National Park Service needs to decide whether the Benzie Corridor remains essential to the National Lakeshore’s purpose (e.g., for providing a

scenic road or trail), or whether the corridor should be recommended for removal from the park boundary. However, until such time that Congress acts to alter current mandates, the National Park Service will continue to acquire property for a scenic road on a willing-seller basis or via donations.

### **Crowding and Overuse**

Some visitor facilities and areas of the National Lakeshore are crowded and congested during the summer. Areas that the public has expressed particular concern about include the Dune Climb, the Platte River and the area around its mouth, and beach access parking areas. Crowding and congestion affects visitor experiences, strains park infrastructure, and may result in harm to natural and cultural resources. A general management plan must deal with issues of crowding and provide general direction for addressing user capacity at locations throughout the National Lakeshore.

### **Management of Newly Acquired Park Lands**

About 1,720 acres of new lands have been added to the National Lakeshore since 1979, when the last *General Management Plan* for the park was prepared. The National Park Service must decide how to manage these new areas (e.g., Bow Lakes, Miller Hill, and Crystal River areas) for resource protection and visitor enjoyment.

## FOUNDATION FOR PLANNING AND MANAGEMENT

### PURPOSE

Purpose statements convey the reason(s) for which the national park unit was set aside as part of the national park system. Grounded in an analysis of park legislation (appendix A) and legislative history, purpose statements also provide primary criteria against which the appropriateness of plan recommendations, operational decisions, and actions are tested. The purpose of Sleeping Bear Dunes National Lakeshore is as follows:

- To preserve outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena in their natural setting and protect them from developments and uses that would destroy the scenic beauty and natural character of the area for the benefit, inspiration, education, recreation, and enjoyment of the public.

### SIGNIFICANCE

Significance statements capture the essence of the national park unit's importance to the nation's natural and cultural heritage. They describe the unit's distinctiveness and describe why an area is important within regional, national, and global contexts. This helps managers focus their efforts and limited funding on protection and enjoyment of attributes that are directly related to the purpose of the park unit. The significance statements for the National Lakeshore are as follows:

- The National Lakeshore contains compactly grouped features of continental glaciation, including post-glacial shoreline adjustment, ridge/swale complex, wind-formed dunes, perched dunes, and examples of associated plant succession. These features are of global importance

due to their relatively unimpacted state, the variety of features present, and their proximity to one another.

- The National Lakeshore preserves outstanding scenic and publicly accessible resources. Its massive glacial headlands, expansive Lake Michigan beaches, diverse habitats, superb water resources, and rich human history offer an exceptional range of recreational, educational, and inspirational opportunities.
- The collection of historic landscapes — maritime, agricultural, and recreational — in the National Lakeshore is of a size and quality unsurpassed on the Great Lakes and rare elsewhere on the United States' coastline.
- The National Lakeshore's native plant and animal communities, especially the northern hardwoods, coastal forests, dune communities, and interdunal wetlands, are of a scale and quality that is rare on the Great Lakes shoreline. These relatively intact communities afford an opportunity for continuation of the ecological processes that have shaped them.

### FUNDAMENTAL RESOURCES AND VALUES

Fundamental resources and values are systems, processes, features, visitor experiences, stories, and scenes that deserve primary consideration in planning and management because they are critical to maintaining the park's purpose and significance. Fundamental resources and values are subject to periodic review and updates based on new information or changing conditions. The planning team, with assistance from other resource experts and the public, has identified the following

fundamental resources and values for Sleeping Bear Dunes National Lakeshore. The fundamental resources and values listed below are only a portion of the Lakeshore's total resources and values; all resources and values were considered in this planning effort.

### Geologic Processes

- ridge and swale topography resulting from old shorelines (e.g., along the Crystal River and the Boekeloo area)
- perched dunes (e.g., Sleeping Bear Plateau/dune complex)
- Bow Lakes (kettle lakes — glacial origin)

### Visitor Opportunities and Scenery

- Dune Climb
- Pierce Stocking Scenic Drive
- scenic views of historic farmsteads, inland lakes, Lake Michigan shoreline (Empire Bluffs, Sleeping Bear Plateau, Pyramid Point), to/from the shoreline of Manitou Islands, and emergence from dense canopy to open dunes
- Lake Michigan beaches
- experiences of North Manitou and South Manitou islands
- opportunities for quiet, solitude, and naturalness
- Platte River and Crystal River experiences
- learning about the natural and cultural heritage of the area (glacial phenomena, diverse habitats, human history)
- the opportunity for visitors to understand the complex and rapidly disappearing natural history of the ecosystems that evolved along the Great Lakes shoreline

### Cultural Resources and History

- three U.S. Life-Saving Service stations/South Manitou Island Light Station
- Port Oneida Rural Historic District
- Glen Haven area

### Ecological Communities

- excellent examples of plant succession transition from shoreline edge to climax hardwood forest (e.g., Esch Road and Good Harbor areas)
- extensive intact tracts of northern hardwood forest
- Sleeping Bear Plateau dune community complex
- interdunal wetlands (e.g., Boekeloo marsh, Crystal River area)
- freshwater resources

### PRIMARY INTERPRETIVE THEMES

Primary interpretive themes are the most important ideas and concepts communicated to the public about the park. They are the core of all interpretive programs and media provided to park visitors. The following primary interpretive themes are the most important ideas or concepts to be communicated to the public about the National Lakeshore:

- The tall dunes and dramatic sweep of Lake Michigan shoreline at Sleeping Bear Dunes National Lakeshore, along with other more subtle glacial features, provide an outstanding illustration of glaciation and help people to discover and understand the continually evolving surface of the Earth and how it influences the environment in which we live today.
- The spectacular, yet accessible terrain and sublime beauty of the landscapes at Sleeping Bear Dunes National Lakeshore beckon to all who seek opportunities for exploration, discovery, recreation, and solitude that fulfill the human need for inspiration and renewal through connection to the land.
- The diversity of landscapes and structures at Sleeping Bear Dunes National Lakeshore, including the towering sand dunes with a “cap” of trees called by the

region's Anishinabek people "Misha Mokwa" (Sleeping Bear) illustrates the rich American Indian, maritime, agricultural, and recreational history of the area and provides an opportunity to understand and appreciate the traditions, struggles, resourcefulness, and heroism of the people who have lived here using the abundant natural resources for food, shelter, clothing, and commerce.

- The diverse post-glacial landscapes protected by Sleeping Bear Dunes National Lakeshore support relatively intact, but fragile, native plant and animal communities that continue to be shaped by natural ecological processes, affording people the opportunity to understand, cherish, and help save the rapidly vanishing natural heritage of the Great Lakes shoreline.

## **SPECIAL MANDATES**

Special mandates are legislative or judicial requirements that are specific to a particular unit of the national park system. They are typically mandated by Congress or by the courts. Special mandates for Sleeping Bear Dunes National Lakeshore are listed below.

### **Proposed Wilderness**

The 1981 "Wilderness Recommendation" for the National Lakeshore proposed 7,128 acres for wilderness designation. An additional 23,775 acres were identified in this recommendation as potential wilderness, meaning that they would qualify for wilderness designation if and when they became federal lands and nonconforming uses were terminated. This recommendation never went through the necessary reviews and approvals, however, and no wilderness has been formally designated within the National Lakeshore. The total 30,903 acres were, and still are, proposed wilderness. In 1982 Congress

directed the U. S. Department of the Interior to administer the lands proposed for wilderness in the 1981 recommendation so as to maintain their existing wilderness character and potential for inclusion in the National Wilderness Preservation System" (PL 97-361), pending future action by Congress.

### **Road Rights-of-Way**

The park's enabling legislation, PL 91-479, dated October 21, 1970, Section 8 (b) states "Any property or interests therein, owned by the State of Michigan or any political subdivisions thereof, may be acquired only by donation." This applies to all road rights-of-way, including those managed by the Leelanau County and Benzie County road commissions.

### **Scenic Road Corridors**

The National Park Service is authorized to construct and administer, as part of the National Lakeshore, a scenic road within a specified zone (Crystal Ridge) in Benzie County. It is also authorized to acquire, by donation or purchase, limited lands for this purpose (1970 park enabling legislation).

### **Hunting, Fishing, and Trapping**

Hunting and fishing are permitted in the National Lakeshore (1970 park enabling legislation). Trapping is not allowed in the park (1991 decision by the U.S. Court of Appeals).

### **National Historic Landmark — North Manitou Island Life-Saving Service Complex**

The National Lakeshore includes one national historic landmark, the North Manitou Island U. S. Life-Saving Service Complex, which is the highest designation afforded to a cultural

resource. National historic landmarks are governed by Section 110(f) of the National Historic Preservation Act.

### 1836 Treaty

Sleeping Bear Dunes National Lakeshore is in the area ceded by the *Treaty with the Ottawa, etc. March 28, 1836*, between the United States and regional Ottawa and Chippewa peoples. Five federally recognized tribes are in this area. A Consent Decree on the *U.S. v. Michigan 1836 Inland Treaty Rights* case was signed in November 2007. The Consent decree recognizes a treaty-retained right for tribal members to engage in certain hunting, fishing, and gathering activities in the ceded territory (including the National Lakeshore). The five Michigan Indian tribes involved in the agreement are the Bay Mills Indian Community, the Sault Ste. Marie Tribe of Chippewa Indians, the Little Traverse Bay Bands of Odawa Indians, the Grand Traverse Band of Ottawa and Chippewa Indians, and the Little River Band of Ottawa Indians. This plan in no way restricts these rights. How those rights may be exercised with the National Lakeshore will be determined through consultation among the affected tribes and the National Park Service.

## SERVICEWIDE LAWS AND POLICIES

Many park management directives are specified in laws and policies guiding the National Park Service and are therefore not subject to alternative approaches. For example, there are laws and policies about managing environmental quality (such as the Clean Air Act, the Endangered Species Act, and Executive Order 11990 “Protection of Wetlands”); laws governing the preservation of cultural resources (such as the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act); and laws about providing public services (such as the Americans with Disabilities Act)

— to name only a few. In other words, a general management plan is not needed to decide that it is appropriate to protect endangered species, control exotic species, protect historic and archeological sites, conserve artifacts, or provide for access for disabled persons. Laws and policies have already decided those and many other things for us. Although attaining some conditions set forth in these laws and policies may have been temporarily deferred in the park because of funding or staffing limitations, the National Park Service will continue to strive to implement these requirements with or without a new general management plan. The *General Management Plan* is critical in providing guidance on how we comply with laws and policies.

There are other laws and executive orders that are applicable solely or primarily to units of the national park system. These include the 1916 Organic Act that created the National Park Service; the General Authorities Act of 1970; the act of March 27, 1978, relating to the management of the national park system; and the National Parks Omnibus Management Act (1998).

The NPS Organic Act (16 *United States Code*, Section 1) provides the fundamental management direction for all units of the national park system:

[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . by such means and measure as conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The National Park System General Authorities Act (16 *United States Code* [USC] Section 1a-1 et seq.) affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, amendments state that NPS management of park units should not “derogat[e] . . . the purposes and values for

which these various areas have been established.”

The National Park Service also has established policies for all units under its stewardship. These are identified and explained in a guidance manual entitled *NPS Management Policies 2006*. The “action” alternatives considered in this document (the preferred alternative, plus alternatives A, B, and C), as well as the no-action alternative (current management), incorporate and comply with the provisions of these mandates and policies.

## DESIRED CONDITIONS AND STRATEGIES

This section focuses on desired conditions and strategies to guide management of Sleeping Bear Dunes National Lakeshore in all alternatives, including the no-action alternative. They guide actions taken by NPS staff on such topics as natural and cultural resource management, park facilities, and visitor use management. Each topic discussed below has two parts: (a) desired conditions for that topic (in italics), and (b) broad strategies that may be used to achieve those desired conditions.

Desired conditions articulate the ideal conditions the National Park Service is striving to attain. The term desired conditions is used interchangeably with goals. Desired conditions provide guidance for fulfilling the park's purpose and for protecting the park's fundamental resources and values on a Lakeshore-wide basis.

The strategies describe actions that could be used by the National Park Service (and/or its partners) to achieve the desired conditions. Most of these strategies are already being implemented. Those not already being implemented are consistent with NPS policy, are not believed to be controversial, and require no analysis and documentation under the National Environmental Policy Act of 1969 (or analysis and documentation would be completed separately from this *General Management Plan / Wilderness Study / Environmental Impact Statement*). This is not an exhaustive list of strategies. As new ideas, technologies, and opportunities arise, they will be considered if they further support the desired condition.

The Lakeshore-wide desired conditions and strategies in this section, combined with the management actions that are specific to the management alternative ultimately selected for implementation (see chapter 2), will form the complete general management plan for the National Lakeshore.

### Ecosystem Management

*National Lakeshore staff demonstrates leadership in resource stewardship and conservation of ecosystem values. The dunes, forests, and aquatic systems are managed from an ecosystem perspective, considering both internal and external factors affecting visitor use, environmental quality, and resource stewardship. Management decisions about ecosystems are based on scholarly and scientific information. Resources and visitation are managed in consideration of the ecological and social conditions of the National Lakeshore and surrounding area. NPS managers adapt management strategies to changing ecological and social conditions and are partners in regional land planning and management.*

### Strategies

- Continue to participate in and encourage ongoing partnerships with local, state, and federal agencies, and nongovernmental organizations in programs that have importance within and beyond park boundaries. Partnerships important to the long-term viability of critical natural resources include the following:
  - Monitoring water quality of local water bodies and Lake Michigan.
  - Managing wildlife across human-created boundaries (such as jurisdictions, property lines, and fences).
  - Managing nonnative invasive species.
  - Managing wildland fire.
- Central to ecosystem management is long-term monitoring of changes in the condition of cultural and natural resources and related human influences. Improvement or degradation of resources and visitor experience cannot be determined with any certainty without a monitoring program. To protect, restore, and enhance park resources and to sustain visitor use and enjoyment

within and around the National Lakeshore, NPS staff would do the following:

- Initiate or continue long-term monitoring of resources and visitor use, including use of the visitor experience and resource protection framework or other user capacity process, as appropriate. (See “User Capacity (Carrying Capacity)” discussion in chapter 2.)
- Promote research to increase understanding of National Lakeshore resources, natural processes, and human interactions with the environment, with emphasis on fundamental resources and values.
- Practice science-based decision-making and adaptive management, incorporating the results of resource monitoring and research into NPS operations.
- Identify lands/waters outside the National Lakeshore where ecological processes and human use affect park resources or are closely related to park resource management considerations; initiate joint research, monitoring, management actions, agreements, or partnerships to promote resource conservation.
- Provide education and outreach programs to highlight conservation and management issues facing the park and related lands and encourage partners who are able to assist with ecosystem stewardship.
- Continue the disturbed site restoration program.
- Strive to control invasive nonnative species in coordination with adjacent landowners, inholders (those owning lands within the park boundary), other agencies, and NPS staff specialists.

### Natural Resources (General) and Diversity

*The resources and processes of the National Lakeshore retain a significant degree of*

*ecological integrity. Natural wind, sand, and water processes function as unimpeded as possible. Management decisions about natural resources are based on scholarly and scientific information and on the National Lakeshore’s identified fundamental resources and values. Park resources and values are protected through collaborative efforts with neighbors and partners. Visitors and employees recognize and understand the value of the park’s natural resources. Human impacts on resources are monitored, and harmful effects are minimized, mitigated, or eliminated.*

*Biologically diverse native communities are protected and restored when possible. Particularly sensitive communities are closely monitored and protected. Endemic species and habitats are fully protected; nonnative species are controlled, and native species are reintroduced when conditions allow. Genetic integrity of native species is protected. Threatened and endangered species are protected to the greatest extent possible and are generally stable or improving. Natural fire regimes are investigated and supported where possible.*

### Strategies

- Continue to inventory biotic and abiotic resources in the National Lakeshore and assess their status and trends.
- Continue long-term systematic monitoring of resources and processes to detect natural and human-caused trends, document changes in species or communities, evaluate the effectiveness of management plans and restoration projects, and mitigate impacts where possible.
- Continue research that furthers understanding of the geology, sand, wind, and water processes that underlie the dune system.
- Implement and keep current a cooperative wildland fire management plan that maintains conditions within the natural range as much as possible.
- Inventory human-made structures and modifications, and remove those that do not contribute to the purposes or

management of the park or are judged to be unsafe provided they have been determined not to have cultural significance.

- Provide information to adjacent homeowners and private landowners on natural processes, wildlife, critical habitats, and threats to resources.
- Conserve and restore habitats for threatened and endangered species and species of special concern (e.g., piping plover, Pitcher's thistle, and Michigan monkey flower).
- In conjunction with other NPS offices, continue to expand the park's data management systems for analyzing, modeling, predicting, and testing trends in resource conditions.
- Continue to regularly update the park's resource stewardship strategy.
- Apply mitigation techniques to minimize impacts of construction and other activities on park resources.
- Continue to educate staff, visitors, and the public about the significance of natural resources and major threats to these resources.

### Air Quality

*Sleeping Bear Dunes National Lakeshore is a Class II area under the Clean Air Act (this designation allows for limited amounts of new air emissions). The air quality of the National Lakeshore is enhanced or maintained.*

#### Strategies

- Continue to monitor and record air pollution levels and analyze changes over time.
- Monitor and reduce emissions, when possible, from activities within the National Lakeshore boundaries.
- Continue to participate in regional air quality planning and research and implementation of air quality standards.

### Water Quality and Quantity

*Sleeping Bear Dunes National Lakeshore's water quality and quantity reflect natural conditions and support operational, and recreational uses. Outstanding water quality is protected and preserved.*

#### Strategies

- Continue to monitor water quality and quantity within a local and regional context, and expand monitoring as needed to more fully understand the status and trends of ground and surface water.
- Participate in local, state, and national water quality remediation and watershed planning programs.
- Update strategies for water resources management as needed to reflect changing resources and management issues.
- Continue to inventory wetlands so that important wetland communities can be identified and protected.
- Continue to identify and address threats to wetlands, such as purple loosestrife and other exotic species.
- Continue to assess human-related threats to water quality and quantity.
- Continue to monitor E. coli at designated recreational beaches.

### Wildlife Management

*Natural wildlife populations and systems are understood and perpetuated. Natural fluctuations in populations are permitted to occur to the greatest extent possible. Natural influences are mimicked if necessary. National Lakeshore staff work with neighbors and partners to achieve mutually beneficial goals related to wildlife.*

#### Strategies

- Continue cooperative management of threatened or endangered species within the National Lakeshore to stabilize or improve the status of these species.

- Strive to identify species that have occupied the National Lakeshore in the past, and evaluate the feasibility and advisability of reintroducing extirpated species.
- Continue to cooperate with the Michigan Department of Natural Resources (MDNR) Fisheries and Wildlife management staff to better understand populations and determine appropriate management actions for game and nongame species.
- Work with MDNR Fisheries and Wildlife management staff to address conflicts between hunters and other recreational users of the Lakeshore.

### Cultural Resources (General)

*Cultural resources are identified, evaluated, managed, and protected within their broader context. Management decisions about cultural resources are based on scholarly research and scientific information, fundamental resources and values, and consultation with the Michigan state historic preservation officer and with American Indians, as appropriate. The historic integrity of properties listed in (or eligible for listing in) the National Register of Historic Places is protected. Visitors and employees recognize and understand the value of the park's cultural resources. Human and natural impacts on cultural resources are monitored, and adverse effects are minimized or eliminated.*

### Strategies

- Continue to collect information to fill gaps in the knowledge and understanding of the National Lakeshore's cultural resources, to assess status and trends, and to effectively protect and manage cultural resources.
- In accordance with the National Historic Preservation Act of 1966, as amended, continue to locate, identify, and evaluate cultural resources to determine if they are eligible for listing

in the National Register of Historic Places (national register).

- Prepare and update national register nominations as appropriate.
- Update and keep current the National Lakeshore's cultural landscape inventory and List of Classified Structures (the NPS inventory of evaluated historic and prehistoric structures that have historical, architectural, and/or engineering significance)
- Work in consultation with the Michigan state historic preservation officer, American Indian tribes as appropriate, and other interested parties to identify, evaluate, and determine appropriate treatment for historic structures, sites, and cultural landscapes throughout the park.
- Conduct scholarly research and use the best available scientific information and technology for making decisions about management of the park's cultural resources.
- Build a partnership program that considers appropriate adaptive use to assist in maintaining historic buildings and cultural landscapes throughout the park.
- Continue to initiate and regularly update plans and prioritize actions needed to protect cultural resources.
- Continue to research, document, catalogue, exhibit, and store the Lakeshore's museum collection according to NPS standards.
- Continue to educate staff, visitors, and the public about cultural and historic issues relating to the park.
- Treat all cultural resources as eligible for the national register pending formal determination.

### Historic Structures

*The character of historic structures is preserved in good condition to retain a high degree of integrity. Whenever possible, adaptive use of historic structures for park needs is considered before building new infrastructure.*

### **Strategies**

- Prepare historic structure inventories and reports, and amend them as needed. Implement actions identified in historic structure reports and add a record of treatment to the reports.
- Prepare and update national register nominations as appropriate.
- Monitor, inspect, and manage identified and evaluated historic structures to enable long-term preservation of historic features, qualities, and materials.
- Use historic structures as they were historically used, or adaptively use them in ways that are compatible with park purpose and that maximize retention of historic materials, features, spaces, and spatial relationships.
- Consider historic buildings for appropriate adaptive use by other public and private entities to assist in preservation of the structures.
- Create design guidelines and/or historic structure reports for specific areas in the Lakeshore to preserve architectural and character-defining features. Include provisions for design review to ensure the compatibility of new planning, design, and construction.
- Aggressively pursue basic preservation maintenance activities to maintain historic materials in good condition.
- Monitor and regulate use impacts to minimize both immediate and long-term damage to structures.
- Involve historical architects and other professionals in work that could affect historic structures.

### **Cultural Landscapes**

*Sleeping Bear Dunes National Lakeshore's cultural landscapes are preserved in good condition to retain a high degree of integrity. (Cultural landscapes reflect human adaptation and use of natural resources and are often expressed in the way land is organized and divided, patterns of settlement, land use, systems*

*of circulation, and the types of structures that are built.)*

### **Strategies**

- Prepare cultural landscape inventories and reports, and amend existing reports as needed.
- Monitor, inspect, and manage identified and evaluated cultural landscapes to enable long-term preservation of historic features, qualities, and materials.
- Implement actions identified in cultural landscape reports, and add a record of treatment to the reports.
- Create design guidelines and/or cultural landscape reports for specific developed areas in the Lakeshore to preserve landscape-defining features. Include provisions in the guidelines for design review to ensure the compatibility of new planning, design, and construction.
- Have cultural landscape specialists (e.g., historical landscape architects) prepare plans and specifications for preservation, rehabilitation, and restoration, in consultation with the park's Natural Resources Division staff.

### **Archeological Resources**

*Archeological resources in the National Lakeshore are identified and preserved. (Archeological resources are the remains of past human activity and records documenting the scientific analysis of these remains. Archeological features are typically buried, but may extend above ground. Although archeological resources are commonly associated with prehistoric peoples, they may be products of more contemporary society.)*

### **Strategies**

- Conduct sufficient research to identify and evaluate park archeological resources and assess condition and potential threats.
- Continue long-term monitoring of archeological sites to measure deterioration from natural and human

sources and to evaluate the effectiveness of management actions to protect resources and mitigate impacts.

- Preserve and protect archeological resources by eliminating and avoiding natural and human impacts, stabilizing sites and structures, monitoring conditions, and enforcing protective laws and regulations.
- Make decisions that promote the preservation of archeological resources in place.
- Carry out required consultation and legal compliance, and consider concerns raised.
- Include information about archeological resources, as appropriate, in interpretive and educational programs for the public.

### **Ethnographic Resources**

*Ethnographic resources, the cultural and natural features of a park that are of traditional significance to traditionally associated peoples, are identified and protected to the fullest extent possible. These resources may be objects, beliefs, or places, and may have attributes that are of great importance to the group but not necessarily associated with the reason the park was established or appropriate as a topic of park interpretation.*

#### **Strategies**

- Identify and document, through studies and consultations, ethnographic resources, traditionally associated people and other affected groups, and such groups' cultural affiliations to park resources.
- Recognize the sensitivity of ethnographic resources and associated data and provide confidentiality to the extent possible under the law.
- Have researchers formally collaborate with traditional cultural experts to develop a park strategy for dealing with ethnographic resources.

- Monitor effects of use on ethnographic resources and effects of park plans on authorized uses and traditional users.

### **Visitor Use and Experience**

*Visitors from diverse backgrounds can experience a range of opportunities consistent with the purpose, significance, and fundamental resources and values of the National Lakeshore. Most visitors understand and appreciate the purpose and significance of the National Lakeshore and value their stewardship role in preserving natural and cultural features. They actively contribute to the park's preservation through appropriate use and behavior. Park programs and services are accessible to all, and conflicts between different user groups are minimized.*

*Visitor use levels and activities are consistent with preserving park purpose, significance, and fundamental resources and values, and with providing opportunities for recreation, education, and inspiration. Management decisions are based on scholarly and scientific information. When such information is lacking, managers make decisions based on the best available information, adapting as new information becomes available. Regional recreational opportunities continue to be coordinated among agencies for public benefit and ease of use.*

#### **Strategies**

- Work towards providing programs and facilities that are effective in reaching and serving diverse communities.
- Collect data over time to monitor visitor experiences as part of an overall effort to protect desired resource conditions and visitor experiences.
- Address threats to resources and the visitor experience by means other than limiting or restricting use (e.g., through education programs). If necessary, however, implement more restrictive methods.
- Base restrictions on visitor use on a determination by the park

superintendent that such measures are consistent with the park's enabling legislation and NPS policies, are necessary to prevent degradation of the purposes and values for which the park was established, will minimize visitor use conflicts, or will provide opportunities for quality visitor experiences.

### **Visitor Information, Interpretation, and Education**

*Interpretive and educational services/programs at the National Lakeshore facilitate intellectual and emotional connections between visitors and park resources, foster understanding of park resources and resource stewardship, and build a local and national constituency. Outreach programs through schools, organizations, and partnerships build connections to the park. Curriculum and place-based education inspire student understanding and resource stewardship. Visitors receive adequate information to orient themselves to the park and possible opportunities for a safe and enjoyable visit.*

#### **Strategies**

- Develop and implement a comprehensive interpretive plan, with emphasis on providing information, orientation, and interpretive services in the most effective manner possible. Use both personal (involving authorized staff) and nonpersonal (not involving staff) services (including state-of-the-art technologies) as appropriate.
- Stay informed of changing visitor demographics and preferences to effectively tailor programs for visitors. Develop interpretive media supportive of park purpose, significance, interpretive themes, and fundamental resources and values.
- Continue to promote improved pre-trip planning information and orientation for park visitors through the park's website and other media. Work with

local communities and other entities to provide services outside park boundaries, where appropriate.

- Cooperate with partners, other governmental agencies, educational institutions, and other organizations to enrich interpretive and educational opportunities locally, regionally, and nationally.
- Create and implement an education strategy plan, which outlines goals and actions for providing curriculum and place-based education programs.
- Continue to regularly update plans and prioritize actions needed to serve visitors and provide effective interpretation.
- Continue to educate staff, visitors, and the public about park interpretation/education programs.

### **Viewsheds**

*The visual quality of the natural vistas and cultural landscapes provide park visitors with an immediate and lasting sensory experience that strongly conveys the character of the National Lakeshore. Key scenic vistas are identified and protected. Park managers work with neighbors, local communities, and land managers to preserve scenic values.*

#### **Strategies**

- Identify and document key vistas and viewpoints in the park.
- Work with neighboring landowners, communities, conservancy groups, and management agencies to develop preservation goals for identified viewsheds, identify potential threats, and establish a sense of communal stewardship for important visual resources.
- Work with neighboring communities and partners to preserve the scenic character of park entrance areas and corridors and complement the park's key viewpoints and vistas.

## Night Sky

*The naturally dark night sky is preserved. Artificial light sources in and outside the park do not hinder opportunities to see the moon, stars, planets, and other celestial features. Park staff and partners continue to work with local communities to encourage protection of the night sky. To the greatest extent possible, NPS staff work within a regional context to protect the quality of the night sky and the experience thereof.*

### Strategies

- Establish baseline data for the dark night sky through NPS programs.
- Determine if light sources in the National Lakeshore exceed appropriate levels. Study and implement ways to reduce or minimize artificial and unnecessary light.

## Natural Sounds

*Natural soundscapes are preserved, and sounds of modern society are minimized. Visitors to the National Lakeshore have opportunities in most parts of the park to hear natural sounds.*

### Strategies

- Strive to collect baseline data on park soundscapes to understand characteristics and trends in natural soundscapes.
- Continue to control existing and potential land-based noise sources:
  - Enforce existing noise regulations.
  - Require bus tour companies to comply with regulations that reduce noise levels (e.g., turning off engines when buses are parked).
  - Limit use of generators.
  - Maintain quiet hours in campgrounds.
- Continue to work with the Federal Aviation Administration, commercial businesses, and general aviation entities to minimize noise and visual impacts of aircraft on the park. Continue to

discourage pilots of conventional aircraft and ultralights from flying low along the National Lakeshore. If demand for commercial air tours develops, develop a commercial air tour management plan to address tours and their effects on the park.

- Minimize noise generated by NPS use of noise-producing machinery such as motorized equipment. Consider noise potential when procuring and using park equipment.

## Facilities and Services

*Sleeping Bear Dunes National Lakeshore facilities and related development are the minimum necessary to serve visitor needs and protect park resources. Visitor and administrative facilities are as compatible as possible with natural processes and surrounding landscapes, aesthetically pleasing, and functional. Historic structures and properties are adaptively used when practicable and appropriate. Commercial services in the park are limited to those that are necessary and compatible with the park purpose. If possible, commercial support services are based outside the park rather than inside. Staff housing is sufficient to ensure an adequate level of protection for park resources, visitors, employees, and government property, and to provide necessary services. Adequate response (equipment and people) for visitor, resource, and facility protection; search-and-rescue; fire management; and safety is available. Decisions regarding park operations, facilities management, and development at the National Lakeshore—from initial concept through design and construction—reflect principles of resource conservation and sustainability.*

### Strategies

- Build, locate, and/or modify facilities according to the Guiding Principles of Sustainable Design (NPS 1993) or similar guidelines. Establish architectural guidelines to ensure sustainability and compatibility with the natural and cultural environment. Properly maintain

and upgrade existing facilities using sustainability principles, where possible, to serve the park mission.

- Consider the availability of existing or planned facilities in nearby communities and on adjacent lands, as well as the possibility of joint facilities with other agencies, when deciding whether to pursue new developments in the park. This will ensure that any additional facilities in the park are necessary, appropriate, and cost-effective.
- Integrate NPS asset management practices into decision-making and planning. Build, modify, and/or maintain facilities according to projected funding levels and defined park priorities. Consider removal of facilities that do not meet minimum NPS criteria and/or are not cost-effective to maintain.
- Continue to strive to provide affordable housing within the park for emergency response staff, seasonal and entry-level employees, volunteers, and to support other park needs (housing for researchers, etc.).
- Provide commercial visitor services (for example services provided through concessioners) that are necessary and appropriate for visitor use and enjoyment through the use of concession contracts and commercial use authorizations. Ensure that concession operations are consistent with the protection of park resources and values and demonstrate sound environmental management and stewardship.

### Accessibility to the National Lakeshore

*New and renovated facilities are designed and constructed to be universally accessible in accordance with the Americans with Disabilities Act of 1990 and the Architectural Barriers Act Accessibility Standards (2006). Visitors with limited mobility have opportunities to experience the dunes, surrounding sands and waters, historic structures and cultural*

*landscapes and to enjoy representative portions of the backcountry.*

### Strategies

- Identify and modify existing facilities to meet accessibility standards as funding permits, or as facilities are replaced or rehabilitated. Design new facilities to meet accessibility standards.
- Consider providing public information about ease of access for various facilities and trails.
- Periodically consult with disabled persons or their representatives to increase awareness of the needs of the disabled and to determine how to make the park more accessible.
- Continue to provide boardwalks and human-powered over-sand wheelchairs for visitors with special accessibility needs.
- Develop park interpretive programs per accessibility standards and needs.

### Relations with Private and Public Organizations, Adjacent Landowners, and Governmental Agencies

*The National Lakeshore is managed holistically, as part of a greater ecological, social, economic, and cultural system. Positive relations are maintained with inholders (those owning property within the park boundary), adjacent landowners, surrounding communities, and private and public groups that affect, and are affected by, the National Lakeshore. The National Lakeshore is managed proactively to ensure that NPS values are effectively communicated and understood.*

### Strategies

- Continue to establish and foster partnerships with public and private organizations such as Friends of Sleeping Bear Dunes, Preserve Historic Sleeping Bear, and Manitou Islands Memorial Society to achieve the purposes and mission of Sleeping Bear Dunes National Lakeshore.

- Foster a spirit of cooperation with neighbors, and encourage compatible uses of adjacent lands. Keep landowners, land managers, tribes, local governments, nongovernmental organizations, and the public informed about park management activities and issues. Consult periodically with landowners and communities that are affected by or potentially affected by park visitors and management actions.
- Work closely with local, state, and federal agencies and tribal governments whose programs affect or are affected by activities in the National Lakeshore.
- Continue to support and encourage volunteers who contribute to National Lakeshore programs.

### **Relations with American Indian Tribes**

*The National Park Service recognizes that the Sleeping Bear dunes have long occupied a prominent position for American Indians in the Great Lakes Region and that the National Lakeshore is included in the Ceded Territory of the Treaty of 1836. Park staff work to ensure that traditional American Indian ties to the National Lakeshore are recognized; park staff also strive to maintain positive, productive, government-to-government relationships with tribes culturally affiliated with the park. The rights, viewpoints, and needs of tribes are respected, and issues that arise are promptly addressed. American Indian values are considered in the management and operation of the park.*

### **Strategies**

- To ensure productive, collaborative working relationships, consult regularly and maintain government-to-government relations with federally recognized tribes that have traditional ties to resources in the National Lakeshore.
- Continue to identify and deepen the understanding of the significance of the National Lakeshore's resources and

landscapes to American Indian people through collaborative research.

- Protect and preserve sites and resources that are significant to federally recognized tribes.
- Create opportunities for and invite the participation of tribes in protecting natural and cultural resources of interest within the National Lakeshore.
- Support the continuation of traditional American Indian activities in the park to the extent allowed by law and policy.
- Work with tribes to conduct ethnographic studies that identify culturally significant resources.
- Seek input from tribes during development of interpretive programs that relate to American Indians.
- Consult with American Indians under the Native American Graves Protection and Repatriation Act for actions that affect or have the potential to affect burial remains or items of sacred or ceremonial significance.

### **Wilderness**

*Potential and proposed wilderness areas retain their wilderness characteristics and values. Visitors find opportunities for primitive recreation and solitude. Wilderness areas are affected primarily by the forces of nature, and signs of people remain substantially unnoticeable.*

### **Strategies**

- Administer areas described in the 1981 "Wilderness Recommendation" to maintain their existing wilderness character "until Congress determines otherwise," as directed by Congress in 1982.
- Within five years after wilderness designation, if any, complete a wilderness management plan, to guide preservation, management, and use of wilderness areas. Ensure that management decisions affecting wilderness are consistent with the "minimum requirements"

concept. In the meantime, and in keeping with established NPS policies and Director's Order # 41 "Wilderness Preservation and Management," continue to manage proposed wilderness areas as wilderness.

## Land Protection

*The National Park Service works actively with private landholders and reservation of use and occupancy holders to ensure that National Lakeshore resources and values are protected and preserved. Park staff work with government agencies and nongovernmental organizations to support efforts to protect adjacent lands that are important to preserving the resources within the Lakeshore.*

### Strategies

- Continue to recognize private property and water rights within the National Lakeshore. Continue to communicate with private property owners to understand and address each others' values and concerns.
- Use various techniques to protect National Lakeshore values, including general agreements, acquisition of conservation and access easements, land exchanges, donations, and fee-simple acquisition. Inholdings may be acquired from willing sellers or right-of-first-refusal properties, assuming conditions for transfer are acceptable and compatible with the purposes of the National Lakeshore.
- Carefully site any new telecommunication structures so as to not jeopardize the park's purpose, significance, and fundamental resources and values

(including viewsheds); also consider the park's management zones. Permit new rights-of-way only with specific statutory authority and approval by NPS managers, and only if there is no practicable alternative to such use of NPS lands.

- Continue to support the efforts of others to protect adjacent lands that are important to preserving Lakeshore resources through appropriate planning, zoning, and other protection methods.

## Research

*The National Park Service works with partners to learn about natural and cultural resources and associated values. Research priorities for the National Lakeshore are aligned with its purpose, significance, and fundamental resources and values.*

### Strategies

- Encourage and support basic and applied research through various partnerships and agreements to enhance understanding of resources and processes or to answer specific management questions.
- Mitigate impacts of research conducted on natural and cultural resources, as needed to preserve those resources for future generations to enjoy and study.
- Develop and implement criteria to determine whether requested research supports Lakeshore purpose and significance, or other park goals.
- Develop/update list of research issues that are important to the National Lakeshore.

## BOUNDARY ADJUSTMENTS

As part of general management planning, the National Park Service is required to identify and evaluate boundary adjustments that may be necessary or desirable to carry out the purposes of the park unit. Boundary adjustments may be recommended to

- 1) protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes,
- 2) address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads, or
- 3) otherwise protect park resources that are critical to fulfilling park purposes.

Additionally, all recommendations for boundary changes must meet the following two criteria:

- 4) The added lands will be feasible to administer considering their size, configuration, and ownership; costs; the views of and impacts on local communities and surrounding jurisdictions; and other factors such as the presence of hazardous substances or exotic species.
- 5) Other alternatives for management and resource protection are not adequate.

During scoping for this *General Management Plan*, some members of the public suggested specific areas to consider including within the boundaries of Sleeping Bear Dunes National Lakeshore. For these boundary adjustments to be recommended, at least one of criteria 1–3 above must be met, and both criteria 4 and 5 must be met. NPS staff did a preliminary evaluation of properties that appeared to have the potential to meet the criteria above. However, none of the properties or areas evaluated fulfill these requirements (see appendix B for more information), so they are not included as additions to the boundary in any of the alternatives in this plan.

However, one alternative does propose the deletion of the Benzie Corridor, which would be a boundary adjustment requiring congressional legislation. The establishment of a scenic southern entrance road to the park was included in the National Lakeshore's establishing legislation, and the park boundary includes the Benzie Corridor for that reason. Land has become increasingly expensive in this area, however, and private development continues to take place in the corridor, raising questions as to whether acquiring enough land for a scenic southern entrance is still feasible. The planning team felt that there were valid reasons for considering the removal of the Benzie Corridor and thus included the removal of the corridor in alternative A.

## RELATIONSHIP OF THE GENERAL MANAGEMENT PLAN TO OTHER PLANNING EFFORTS

Sleeping Bear Dunes National Lakeshore does not exist separately from its surroundings. Several plans for areas within or near the National Lakeshore could influence or be influenced by actions presented in this *General Management Plan / Wilderness Study / Environmental Impact Statement* and must be considered. These relevant plans and studies are listed below.

### NPS MANAGEMENT PLANS AND STUDIES

#### Scenic Road Feasibility Study

The “Scenic Road Feasibility Study, Sleeping Bear Dunes National Lakeshore” (NPS 1982) assessed the feasibility of developing a scenic road within the Benzie Corridor. The study consists of two parts. The first part describes the road (alignment, engineering specifications, estimated cost, and scenic aspects) and supporting facilities such as picnic sites, associated trails, and parking areas. The second part evaluates engineering feasibility, projected need for the road, and environmental and socioeconomic impacts that would be associated with constructing the road.

The no-action alternative and alternative B in this *General Management Plan / Wilderness Study / Environmental Impact Statement* include the Benzie Corridor scenic road concept as envisioned in the 1982 feasibility study. For the no-action alternative (continuation of current conditions and activities), the NPS planning team assumed that the scenic road *would not be* built within the life of this *General Management Plan*, so road construction is not assessed for this alternative. For alternative B, the planning team assumed that the road *would be* constructed within the life of this plan, so road construction is assessed for this alternative. The preferred alternative

in this plan retains the option for either the scenic road concept as envisioned in 1982 or for a hike/bike path — to be decided at a future date. Because the decision would be based on a separate environmental document using up-to-date information at an unknown time in the future, the preferred alternative assumes that construction of either option would not occur within the life of this plan. Alternatives A and C in this plan explore scenarios for the Benzie Corridor other than that envisioned in the 1982 feasibility study (see “Chapter 2: Alternatives, Including the Preferred Alternative” for more information).

#### Platte River Management Plan

The “Platte River Management Plan” (NPS 1992b) provided management guidance for the Platte River corridor, including the developed area near the river mouth. Elements of the “Platte River Management Plan” have been implemented. Actions in the *General Management Plan* alternatives are consistent with the “Platte River Management Plan.”

#### Fire Management Plan

The “Fire Management Plan” (NPS 2005a) for Sleeping Bear Dunes National Lakeshore was prepared to address U. S. Department of the Interior and NPS policies related to wildland fire management. The plan: (1) presents goals for preparedness and suppression, hazard fuels management, vegetation management, and public use/awareness; (2) identifies fire management units; and (3) identifies actions for fire suppression, wildland fire use, prescribed fire use, and non-fire treatments to reduce hazard fuels. Implementation of the *Fire Management Plan* will help the National Lakeshore achieve the desired conditions

related to natural resource management and cultural resource preservation presented in this plan.

### **Strategic Plan**

The “Strategic Plan” (NPS 2005b) for Sleeping Bear Dunes National Lakeshore is a five-year plan that contains a mission statement born out of the NPS Organic Act and the specific legislation that established the National Lakeshore. It includes mission goals for the Lakeshore that closely parallel NPS mission goals. It also includes objectives, measurable targets to be achieved over a five-year time frame. Achievement of these targets demonstrates progress toward meeting the Lakeshore’s mission goals. The desired conditions identified in this *General Management Plan* provide information necessary to update the *Strategic Plan*.

### **Port Oneida Rural Historic District Environmental Assessment**

The Port Oneida Rural Historic District (Port Oneida) is representative of late 19th and early 20th century farm landscapes of the upper Midwest and includes 19 farms and more than 3,400 acres of land. The need for the proposed project is driven by the deterioration of cultural resources, with approximately 35 of the 110 historic structures in poor to fair condition and requiring immediate work. Visitation is increasing at Port Oneida and the area currently lacks visitor support services. There are no basic facilities such as public restrooms, a visitor contact station, picnic shelters, or adequate parking areas. The *Port Oneida Rural Historic District Environmental Assessment* assessed four action alternatives that would provide for a visitor contact station and employee housing (in rehabilitated historic structures), improved circulation, rehabilitation and stabilization of historic structures, and stabilization of cultural landscapes. The action alternatives would

provide physical improvements to Port Oneida by creating visitor amenities, rehabilitating or stabilizing historic structures, and restoring or stabilizing historic landscape features. As of late 2007, funding for the Port Oneida improvements had not been obtained. Actions in the *General Management Plan* alternatives are consistent with the “Port Oneida Environmental Assessment.”

## **COUNTY AND REGIONAL PLANS**

### **Leelanau General Plan**

The “Leelanau General Plan” (Leelanau County 2005) for Leelanau County, Michigan, was first adopted in 1995, and updates were approved by the Leelanau County Planning Commission in 2000 and 2005. The “Leelanau General Plan” is intended to serve as the foundation for planning within Leelanau County. The principal goal of the “Leelanau General Plan” is to

establish a strategy for guiding growth that protects and, where possible, enhances the unique character of life on the peninsula. To that end, the General Plan focuses on balancing environmental protection, resource management, and economic development so as to provide a foundation for a suitable economy that permits long term prosperity for all present and future Leelanau County residents. The balance so achieved should not sacrifice environmental quality when reasonable and prudent development alternatives exist. This plan recognizes that a healthy economy depends on a healthy environment. Achievement of this goal means protecting the integrity of the land base for use by present generations without unnecessarily compromising the options of future generations.

Management alternatives for the National Lakeshore assessed in this document are consistent with the principal goal of the “Leelanau General Plan.”

### **Benzie County 2020 Comprehensive Plan**

The purpose of the “Benzie County 2020 Comprehensive Plan” (Benzie County 2000) is to provide policy and guide decision-making for land and infrastructure development decisions within Benzie County. The plan identifies key planning issues; describes the community’s character; outlines a community vision for the year 2020; identifies goals, policies, and actions for achieving the 2020 vision; describes and maps existing and future land uses; establishes public facility standards; identifies transportation improvements; and recommends specific implementation measures. The plan identifies the Benzie Corridor as a “sensitive environment” (sensitive environments include “wetlands, steep slopes, floodplains, dunes, and others”). The plan indicates that the preferred future land use for the Benzie Corridor is primarily “rural residential” (average residential density is less than one dwelling unit per 10 acres) with some “farm preservation” (overall development density is less than one dwelling unit per 40 acres and the purpose is to preserve large, contiguous areas for farming) in the eastern portion of the corridor. The alternatives in this *General Management Plan / Wilderness Study / Environmental Impact Statement* propose various options for the Benzie Corridor. Management alternatives for the National Lakeshore assessed in this document are consistent with the principal goal of the “Benzie County 2020 Comprehensive Plan.”

### **Benzie County Open Space and Natural Resources Protection Plan**

The “Benzie County Open Space and Natural Resources Protection Plan” (Benzie County

2002) identifies county lands that are high priority for protection and explains why they are a high priority. The plan suggests that some of the most important open space and natural resource lands should be purchased if the owners are willing to sell all or part of their development rights. The plan also provides tools for property owners to use in transferring development rights to local government or conservation organizations in ways that benefit the property owners and are practical for the community. The plan identifies the Benzie Corridor as a high priority scenic corridor protection area based on concerns about preserving views of the natural ridgeline from surrounding areas. The alternatives in this *General Management Plan / Wilderness Study / Environmental Impact Statement* propose various options for the Benzie Corridor. All the management alternatives assessed in this document except alternative A would be consistent with the principal goal of the “Benzie County Open Space and Natural Resources Protection Plan.” Alternative A recommends removing the Benzie Corridor from the National Lakeshore boundary, which would likely mean less protection of scenic and natural qualities.

## **COOPERATIVE PLANS**

### **Leelanau Scenic Heritage Route Trailway**

Sleeping Bear Dunes National Lakeshore is working with the Leelanau Scenic Heritage Route Committee on planning for a 27-mile nonmotorized trailway. The route would generally follow M-22 and M-109 through the National Lakeshore from the Lakeshore’s northern boundary at County Road 651 to the Leelanau–Benzie County line at Manning Road south of Empire, Michigan. The trailway would connect visitor sites and facilities, including campgrounds, historic sites, beaches, trailheads, and other points of interest within the National Lakeshore. It would also provide a nonmotorized trail connection between the villages of Empire

and Glen Arbor. The trailway would be on public land (either Michigan Department of Transportation right-of-way or National Lakeshore property), separated from the roadway, where possible, providing safe, alternative recreation and transportation opportunities for Lakeshore visitors and residents.

Grant funds and donations have been used to contract with an architectural, design, and engineering firm to conduct a pre-engineering study and environmental assessment to determine the trail route and alignment, design concept, probable cost and range of uses for a multipurpose trailway. The project falls under the umbrella of the Leelanau Scenic Heritage Route, designated in 2001 under the Michigan Department of Transportation State Heritage Route Program and coordinated by the Northwest Michigan

Council of Governments. The Leelanau Scenic Heritage Route committee appointed a Trailway Work Group, which includes the Northwest Michigan Council of Governments, the National Park Service, Friends of Sleeping Bear Dunes, Michigan Department of Transportation, Traverse Area Recreation and Transportation (TART) Trails, local governments, and citizens. After completion and review of the environmental assessment and pre-engineering study, in cooperation with the Michigan Department of Transportation and the National Park Service, the Leelanau Scenic Heritage Route committee hopes to apply for Federal Transportation Enhancement funds to design and construct the trailway. The Leelanau Scenic Heritage Route Trailway is included in each action alternative. The goals of the trailway support the desired conditions for visitor use and experience at the Lakeshore.

## ONGOING NPS PROJECTS AND PROJECTS PLANNED FOR THE NEAR FUTURE

Projects that are ongoing or that are funded and likely to be initiated (or even completed) before this GMP/WS effort is complete are listed below. These projects *are not* part of actions proposed in this *General Management Plan / Wilderness Study / Environmental Impact Statement* and will be (or have been) covered under separate environmental compliance documents. These projects *are* considered in the cumulative effects sections of this document.

### BEACH ACCESS IMPROVEMENTS — ENDS OF LEELANAU COUNTY ROADS 651 AND 669

In cooperation with the Leelanau County Road Commission, improvements will be made to beach access at the ends of Leelanau County Roads 651 and 669. The National Park Service will provide paved designated off-road parking areas (about 25 spaces each) to improve vehicular circulation and pedestrian safety and reduce damage to roadside resources that results from parking along the road shoulders. Each site will be provided with potable water service, picnic tables, visitor information panels, accessible parking spaces, and other accessible facilities.

### GLEN HAVEN VILLAGE IMPROVEMENTS

This project will combine preservation and interpretation of the historic Glen Haven village with outdoor recreational use at one of the National Lakeshore's busiest beaches. The National Park Service will preserve and stabilize historic structures and will provide interpretive information, audiovisual site history, boat exhibits, asbestos removal, housing, underground utility service, parking, sidewalks, and boardwalks and facilities for

picnicking, visitor education, and recreation. Historic structures will be rehabilitated for visitor use facilities and interpretation and/or adaptive use by partners. This project will provide operational efficiencies and reduce visitor impacts on the adjacent dunes that provide critical habitat for the endangered piping plover.

### LAKE MICHIGAN OVERLOOKS IMPROVEMENTS—PIERCE STOCKING SCENIC DRIVE

Lake Michigan Overlooks 9 and 10 on the Pierce Stocking Scenic Drive will be improved to address natural resource, scenic, safety, and maintenance concerns. The perched dune bluff at this location, which is one of the Lakeshore's fundamental resources, is about 450 feet above Lake Michigan. The path from the parking area to the overlooks takes visitors directly across the top of the bluff face, and despite signs discouraging visitors from descending in the sand toward Lake Michigan, many do so. Safety is a concern because some visitors are injured during the descent from missteps or falls or during the ascent from heart and heat-related illnesses. The heavy and concentrated foot traffic in this location has caused considerable erosion of the dune face. Finally, maintaining the current configuration of the path and overlooks is difficult and not cost-effective because of the need to frequently remove the blowing and shifting sand.

### RESTORE THE FORMER WATER WHEEL AND CASEY'S CANOE LIVERIES — PLATTE RIVER

The Platte River banks at the former Water Wheel and Casey's canoe liveries are being restored. Collapsing retaining walls at the sites

posed a visitor safety hazard and impaired the river channel's natural function and appearance. An environmental assessment was completed in August 2007. The retaining walls and backfill have been removed, and restoration activities are underway.

### **RESTORATION OF DISTURBED AREAS WITHIN THE NATIONAL LAKESHORE**

The National Park Service will continue to restore nonhistoric areas disturbed by past land uses to more natural conditions. Where cultural resources are probable, national register evaluation would occur before a decision as to final disposition is made. Such actions would, as always, be undertaken in consultation with the state historic preservation office. Structures on these properties may have deteriorated, presenting serious health and safety concerns. Many of these areas have nonnative vegetation, disturbed soils, and disturbed topographic and hydrologic patterns. Some of the areas are in state-designated critical dunes. There is concern that threatened or endangered native plants such as Pitcher's thistle and three-birds orchid will be overtaken by nonnative invasive species such as leafy spurge, garlic mustard, and Scotch pine. To restore these areas, the National Park Service will remove any nonhistoric structures, remove or otherwise

mitigate any hazardous materials, and reestablish more natural landforms. Non-native vegetation will be removed, and native vegetation will be reestablished using seeds, transplants, and cuttings from other areas of the National Lakeshore. The ultimate goal is restoration of natural habitats and processes.

### **SOUTH MANITOU LIGHTHOUSE COMPLEX — EXTERIOR RESTORATION AND INTERIOR REHABILITATION**

The National Park Service will restore the exterior of the keeper's quarters and connecting passageways. The structures' interiors will be rehabilitated to allow for public access and displays. Work will include painting walls and trim, refinishing floors, and repairing some plaster walls. (See page 40 for cultural resources treatment definitions.)

### **DUNE CLIMB PARKING AREA — PAVING AND OTHER MINOR IMPROVEMENTS**

The National Park Service will pave the Dune Climb parking area and make other minor improvements to alleviate vehicular circulation and drainage problems and improve access for the disabled.