FINDING OF NO SIGNIFICANT IMPACT

SOUTH MANITOU ISLAND BOAT DOCK EXTENSION SLEEPING BEAR DUNES NATIONAL LAKESHORE

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) has prepared an Environmental Assessment (EA) to examine alternatives and potential environmental impacts associated with the proposal to extend and improve dock facilities providing boat access to South Manitou Island (SMI) in Sleeping Bear Dunes National Lakeshore (National Lakeshore).

The General Management Plan for the National Lakeshore (NPS 2009) determined that ferry service for day and overnight stays on SMI would continue. The SMI boat dock, which is used for the ferry service, NPS boats and occasionally by private boats, is located on the southeast shore of SMI bay. This location is a convenient access point to the island for public visitors and NPS staff. From the dock, visitors have a short walk to the lighthouse built in 1871, a U.S. Life-Saving Service and Coast Guard station that is now a ranger station, and several preserved historic 19th century farm buildings. The island's many trails begin from the dock landing and allow visitors a scenic hike to the high perched dunes overlooking the island's western shore, a natural inland lake (Florence Lake), three designated backcountry campgrounds, and numerous other natural features.

While the current boat dock location is sheltered from prevailing winds, it also lies in shallow water along the shoreface of the beach in an area subject to sediment accumulation. Eventually, this buildup of sediment forms a sandbar beneath the boat dock that extends out into open water, blocking access to the dock. NPS personnel perform periodic dredging of the area around the dock. Until 1991, when the upland disposal site reached capacity, dredge spoil was disposed of on the island at an upland site that was not designated as a wilderness area. Since 1991, annual dredging operations have continued with disposal of the dredge spoil using a beach nourishment program to fortify sections of the SMI shoreline reduced by erosion.

This Finding of No Significant Impact and the EA constitute the record of environmental impact analysis and the decision-making process for the project. The NPS will implement the Preferred Alternative to extend the existing dock up to 100 feet further into Lake Michigan. The Preferred Alternative includes measures for the protection of park resources and was selected after careful review of resource and visitor impacts and public comment.

SELECTION OF THE PREFERRED ALTERNATIVE

This EA evaluated two alternatives; Alternative A, the No Action Alternative (continue current management); and Alternative B, the Preferred Alternative (SMI Dock Extension). Alternative B is the NPS Selected Alternative because it best meets the purpose and need for the project.

As described in the EA, Alternative B consists of extending the existing dock up to 100 feet further into the lake past the existing ell. The purpose of the dock extension is not to increase capacity to serve larger or more vessels, but to provide visitors and staff safe and convenient access to SMI resources while reducing or eliminating routine dredging and large quantity dredging.

Under Alternative B, the existing dock will be extended into deep water. Visitor and staff safety would be improved because vessels would no longer need to enter shallow water to dock. The need to routinely dredge would be reduced and the need for large quantity, contracted dredging would be eliminated. Extending the existing dock also retains the safety advantage of having dock in a location that is sheltered

from prevailing winds. By extending the existing dock, the point of access to resources on SMI would not change and there would be no need to modify the existing road or trail system on SMI.

MITIGATION MEASURES

The following mitigation measures were developed to minimize the degree and/or severity of adverse effects and would be implemented during construction of the selected alternative, as needed:

- To reduce noise and emissions, construction equipment would not be permitted to idle for long periods of time.
- To minimize the potential for impacts to park visitors, variations on construction timing may be considered. The primary option includes conducting the majority of the work in the off-season (early spring) or shoulder seasons. Another option includes implementing daily construction activity curfews such as not operating construction equipment between the hours of 6 PM to 7 AM in summer (May through September). The NPS would determine this in consultation with the contractor.
- Access for the passenger ferry service will be retained if construction activities occur when the ferry operates.

ALTERNATIVES CONSIDERED

Two alternatives were evaluated in the EA: the no action alternative and one action alternative. Three other alternatives were considered but dismissed because of issues related to visitor and staff access and safety, additional impacts to cultural and/or natural resources, or wilderness considerations.

Under Alternative A, the No Action alternative; the proposed dock extension at SMI would not be constructed. The existing dock facility would continue to operate. Additionally, there would be a continued need for on-going maintenance dredging to support ferry operations. This dredging would be conducted as needed and would result in the removal of materials from the dock area and the disposal of such materials in nearshore aquatic habitats.

Because of increased sediment deposition currently present in the existing dock area, dredging by an outside contractor would likely still be required because the volume of sediment to be removed is beyond National Lakeshore personnel removal capabilities. In addition, moving forward, National Lakeshore personnel will still need to spend an estimated two weeks per year of two personnel working 12 hour days to try to maintain a depth which would allow ferry docking. Depending on lake level fluctuations and sediment deposition rate, additional contracted dredging services may be needed.

Alterative B, SMI Dock Extension, is the Preferred Alternative. Alternative B consists of extending the existing dock up to 100 feet further into the lake past the existing ell. Construction of this facility is expected to be completed in a 3 to 4 week timeframe. No construction materials will touch the land surface. All equipment and materials will be stored or used from a barge. The structure will be constructed out of wood and steel connectors. Wood pilings will be driven into the lake bottom to form the basis of the structure and would be of a similar type as the existing dock facility.

The following text further describes the components of the selected alternative:

- **Dock Features** – Dock features will include courtesy lighting and light duty electrical outlets. Water will not be provided.
- **Use/Operation of the Facility** – The dock facility will be used primarily by the concessionaire who operates the ferry boats for the NPS. Their primary objective is to deliver visitors to SMI

and they operate from May through September. Other smaller boats operated by the NPS also use the dock to deliver NPS supplies and transport NPS personnel. Private boats may tie up briefly to the dock for boarding/off-loading and delivery.

- **Utilities** – Electricity is available at the dock to allow operation of lighting and provide limited access electrical outlets.
- **Access** – As previously mentioned, access is primarily for NPS regulated boat traffic, with some short term public access allowed for pickup and drop off only. The nearest mainland port relative to the SMI dock is in Leland, Michigan, approximately 16 miles away.
- **Construction Staging** – To implement this alternative, all necessary materials will be transported and staged/stored on work barges. Staging/storing materials on shore will not be necessary to implement this alternative.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

As stated in Section 2.7.D of Director's Order #12 and Handbook, the environmentally preferable alternative is the alternative that will promote the national environmental policy expressed in the National Environmental Policy Act (NEPA) (Sec. 101 (b)). The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA §101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural and natural resources (Council on Environmental Quality, 1981).

The Alternative B, the Preferred Alternative (the selected alternative) is the environmentally preferable alternative. It would not only meet the objectives listed in the EA but also is the alternative that causes the least damage to the biological and physical environment in the long-term and would best preserve, protect, and enhance natural resources.

THE SELECTED ALTERNATIVE AND SIGNIFICANCE CRITERIA

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial:

No long-term major adverse or beneficial impacts were identified that require analysis in an environmental impact statement. The selected alternative will result in short-term minor adverse impacts to water resources, aquatic ecology, air and noise emissions, and the visual environment. Any impacts to these resources will be offset by the reduced impacts associated with a lower frequency of dredging needed to support dock access. Long term benefits of the selected alternative include less frequent disruption and disturbance of these resources, reduced impact on National Lakeshore operations, and enhanced access and visitor experience.

2. The degree to which the proposed action affects public health or safety:

One of the objectives of the project is to provide visitors and staff safe access to SMI. Extension of the dock under the selected alternative will ensure that docking operations are routinely conducted in deep water, thereby enhancing public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:

There are no prime farmlands, wetlands, floodplains or wild and scenic rivers in the project area. Historic/cultural resources in the project vicinity include the SMI Lighthouse Complex and Life-Saving Station Historical District (District) which is listed on the National Register of Historic Places. The proposed new dock facility does not alter or impact any elements included in the District. Additionally the new dock is designed to be consistent with the existing dock facility in appearance and materials and as such does not represent a significant adverse visual impact on the cultural landscape in the vicinity of the project area.

The Federally-threatened Pitcher's thistle has been found in the project area; however, no effects to the Pitcher's thistle are expected as all activities will occur in the aquatic environment and thus do not affect the Pitcher's thistle habitat.

4. The degree to which the effects on the quality of the human environment is likely to be highly controversial:

Implementation of the selected alternative will not result in controversial effects on the human environment. No comments were received from the public during the public comment period.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks:

There were no highly uncertain, unique, or unknown risks identified either during the preparation of the environmental assessment or during the public review period.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

The selected alternative neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:

No other past, present, and reasonably foreseeable future management activities were identified in the vicinity of SMI that could contribute to cumulatively significant impacts to resources of concern

8. Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

This action will not adversely affect any resources listed on, or eligible for, the National Register of Historic Places, nor will it impact any other significant park resources. The proposed dock extension is designed to be consistent with the existing dock facility in appearance and materials and as such does not represent a significant adverse visual impact on historic landscape features in the vicinity of the project area. Consultation with the State Historic Preservation Office was initiated in a May 27, 2011 letter. In a letter dated December 20, 2011, Mr. Brian Conway (State Historic Preservation Officer) indicated his concurrence that the proposed action would not have an adverse effect on historic properties.

The National Lakeshore also notified the State Historic Preservation Office of the release of a revised EA in an e-mail sent June 5, 2012. This e-mail summarized the changes made in the revised EA and noted that the document did not analyze additional alternatives or impact topics but clarified information from

the initial EA. In a responding e-mail sent June 6, 2012, the State Historic Preservation Office concurred that further Section 106 consultation was not required.

9. Degree to which the action may adversely affect an endangered or threatened species or its critical habitat:

Section 7 of the Endangered Species Act requires Federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) when any activity permitted, funded, or conducted by that agency may affect a listed species or designated critical habitat, or is likely to jeopardize proposed species, or adversely modify proposed critical habitat. The National Park Service has a close relationship with the USFWS and routinely discusses threatened and endangered species issues in the National Lakeshore and requested input from the USFWS in a letter dated September 30, 2012.

Several federally listed threatened and endangered species are known to occur within the Lakeshore including the following:

The endangered piping plover (*Charadrius melodus*), and the threatened Pitcher's thistle (*Cirsium pitcheri*). The Federally threatened Pitcher's thistle (*Cirsium pitcheri*) has been found in the project area. The Federally endangered piping plover (*Charadrius melodus*) has not been observed nesting in the immediate project area, and the project area lies outside the area designated by USFWS as critical habitat.

In an October 24, 2011 letter, USFWS concurred with our determinations that the selected alternative would have no effect on Pitcher's thistle populations.

The National Lakeshore also notified the USFWS of the release of a revised EA in a letter dated June 15, 2012. This letter summarized the changes made in the revised EA and noted that the document did not analyze additional alternatives or impact topics but clarified information from the initial EA. No response was received from the USFWS.

10. Whether the action threatens a violation of Federal, State, or local environmental protection law:

The selected alternative will not violate any Federal, State, or local environmental protection laws.

PUBLIC INVOLVEMENT

Coordination and public participation was initiated early in this project. Public participation began with scoping letters that were sent on May 27, 2011 to resource and regulatory agencies.

The EA was initially placed on public review through the National Park Service Planning, Environment and Public Comment (PEPC) website for 30 days beginning October 3, 2011. A press release was issued on October 5, 2011, and distributed electronically to the 42 media outlets in the National Lakeshores' media database. Information announcing the release of the EA and requesting public input was posted on the National Lakeshore's website (nps.gov/slbe) with a link to the PEPC website. Hard copies were made available for public review at area libraries and government offices.

As a result, no comments were received on the EA from the public. Letters were received from the USFWS, East Lansing Office, and the Michigan State Historic Preservation Officer.

A revised EA was released for public review through PEPC for a 30 day review period beginning June 15, 2012. This document did not analyze additional alternatives or impact topics but clarified some information found in the initial EA and briefly describes alternatives considered but dismissed early in the

planning process. It also reflected the current NPS procedure for implementing the requirements of NEPA. A press release was issued on June 15, 2012, and distributed electronically to the 42 media outlets in the National Lakeshores' media database. A hardcopy was also made available at the Philip A. Hart Visitor Center in Empire, MI and at area libraries. Letters (or e-mail) were also sent to resource and regulatory agencies and to five American Indian Tribal Governments.

As a result, a letter was received from the State of Michigan Department of Environmental Quality and one comment was received from the public. This comment expressed general support for the dock extension and suggested that once a dock extension is constructed that the National Lakeshore consider changes to mooring limitations for private pleasure craft. These mooring limitations are addressed in the National Lakeshore's Compendium.

CONCLUSION

The selected alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The selected alternative will not have a significant effect on the human environment. Negative environment impacts that could occur are minor or moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, or other unique characteristics of the region. There are no unmitigated adverse impacts on sites or districts listed in or eligible for listing in the National Register of Historic Places. No uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

Dusty Shultz, Superintendent
Sleeping Bear Dunes National Lakeshore

7/26/2012
Date

Approved:

Michael Reynolds, Director
Midwest Region

8.2.12
Date

DETERMINATION OF IMPAIRMENT

National Park Service's *Management Policies, 2006* require analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact would be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

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

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

Impairment may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be an impairment is based on whether an action would have major (or significant) effects. In addition, mitigation measures would further lessen the degree of impact to and help promote the protection of these resources and values.

Based on these guidelines and basis for determining impairment of park resources and values, a determination of impairment is made for each of the resource impact topics carried forward an analyzed in the environmental assessment for the preferred alternative.

- **Water Resources** – Under the selected alternative, no additional dredging beyond the NPS conducted maintenance dredging would be needed for several years. Dredging to support access to the new dock facility would be infrequent as the greater depths at the new dock facility will not require on-going annual dredging. Consequently, in the context of the amount of nearshore habitat available in the vicinity of SMI, coupled with the infrequent, short term, localized impact associated with dredging activity, the selected alternative would result in negligible adverse effects to water resources, and would not result in impairment of this resource.

- **Aquatic Ecology** – The likely effect of the selected alternative on the aquatic ecosystem will be a short-term adverse impact due to the construction of the dock extension, followed by a long-term beneficial impact due to the reduction or elimination of maintenance dredging. Direct impacts on benthic macroinvertebrate communities will be negligible because they will occur over a small

area and because nearshore communities in Lake Michigan are already of low diversity. Direct impacts on fish populations will likewise be small. Individual fish will avoid the small area during dock construction, and will return after their completion. The long-term impact of the selected alternative action will be beneficial because it will eliminate or reduce the need for maintenance dredging that would disturb the sediment and result in reduced water clarity for several subsequent days. In the long term, the impact to aquatic species would likely be beneficial, as the proposed action would eliminate or reduce future impacts associated with maintenance dredging. Consequently, this alternative would not result in impairment of this resource.

- **Cultural Landscapes and Historic Structures** – The proposed dock will not directly affect or alter any characteristics of the adjacent historic property. However, it does constitute an extension of the existing dock facility which will represent a minor alteration of the landscape. The proposed dock extension, however, will be designed and constructed in such as way as to provide a feature that is consistent in appearance and materials as the existing dock facility. No significant alteration of the historic landscape is expected. The resultant dock facility is also not considered to alter any factors included in the original evaluation of the property's eligibility for the National Register. Consequently, it is concluded that the proposed project will have no adverse effect on the subject historic property, and would not result in impairment of this resource.

- **Sensitive Species** – Several sensitive species were identified as potentially impacted by the proposed dock extension. Impacts to the lake herring (*Coregonus artedi*), piping plover (*Charadrius melodus*), trumpeter swan (*Cygnus buccinator*), common loon (*Gavia immer*), and bald eagle (*Haliaeetus leucocephalus*) have been evaluated and are discussed below.

  Lake herring is a species that is listed as threatened by the State of Michigan that generally inhabits the midwater regions of the Great Lakes. Construction of the proposed dock extension would take place in shallow water near the shore, not in the midwater regions of Lake Michigan that lake herring prefer. Furthermore, construction would not occur during the late November or early December spawning season due to the potential for winter weather interference. As such, any potential impacts are considered minor and would be of short duration, and would not result in impairment of this resource.

  Piping plover is a species listed as endangered by both the U.S. Fish and Wildlife Service (USFWS) and the State of Michigan that breeds along the shores of the Great Lakes where they prefer wide, sandy, open beaches. The USFWS has designated critical habitat for the piping plover along certain shorelines within National Lakeshore but there is no critical habitat designated on SMI (USFWS, 2001). Construction of the proposed dock extension would occur by barge from the water thereby avoiding direct impacts to piping plover and their habitat. Although construction noise may result in some minor disruption, impacts are considered short term. Existing habitat in the project vicinity is less favorable due to the on-going noise and general disruption of boat operations and tourism. As such, potential impacts resulting from construction of the proposed dock extension are considered minor and project implementation is not likely to adversely affect piping plover or their habitat. Consequently, the selected alternative would not result in impairment of this resource.

  Trumpeter swan is listed as threatened by the State of Michigan and uses marshes and wetlands associated with the Great Lakes. The species was reintroduced to the southern mainland portion of National Lakeshore in 2006 and 2007 (NPS, 2008). Although they have the potential to utilize the harbor on SMI, the habitat in the project area is less favorable (lacks marsh/wetland components) and ongoing boat traffic provides a constant source of disruption. As such, any

potential impacts from the proposed dock extension are considered minor and would be of short duration, and would not result in impairment of this resource.

Common loon is a species listed as threatened by the State of Michigan that prefers lakes with a small island or bog mats and little or no high-speed boat traffic. Common loons are also known to utilize littoral, midwater, and benthic portions of the Great Lakes. Although they have the potential to utilize the harbor on SMI, the habitat here is less favorable because routine and ongoing boat traffic provides a constant source of disruption and is not conducive to loon use. Therefore, potential impacts associated with the preferred alternative are considered negligible or minor and would be of short duration, and would not result in impairment of this resource.

Bald eagle is a species listed as threatened by the State of Michigan that tends to feed, roost, and nest in large trees or snags near water bodies and have been documented from SMI. Favorable habitat is abundant in more remote areas of SMI where boat traffic and general human disturbance is lacking or less prevalent. Although construction noise may result in some minor disruption, impacts are considered short term. As such, any potential impacts from either the selected alternative are considered minor and would be of short duration, and would not result in impairment of this resource.

In addition, implementation of the mitigation measures developed for this project would further lessen the degree of impact to and help promote the protection of these resources.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there would be no impairment of park resources and values from implementation of the preferred alternative.