

LAKE MICHIGAN OVERLOOKS SLEEPING BEAR DUNES NATIONAL LAKESHORE FINDING OF NO SIGNIFICANT IMPACT

BACKGROUND

The *Lake Michigan Overlooks Environmental Assessment* (EA) was prepared to identify and analyze alternative ways to protect park resources, visitors, and staff, while still providing the panoramic view of the natural environment at one of the major visitation sites at Sleeping Bear Dunes National Lakeshore.

Pierce Stocking Scenic Drive is a 7.4 mile self-guided auto tour that provides visitors insight into the history of the area, a sample of vegetative communities, and overlooks of Glen Lake, the Sleeping Bear Dunes, and Lake Michigan. Overlooks 9 and 10 on the drive attract over 200,000 people each year. These overlooks are situated in an area that allows visitors to view the fragile dune environment, Lake Michigan, and the Manitou Islands.

The site has a parking lot for three buses and 54 cars, and includes two vault toilets. A concrete sidewalk leads upslope to the bluff face. A seasonal boardwalk of wood platforms extending over the dune and slope provides access from the concrete sidewalk to Overlooks 9 and 10. This boardwalk is installed each spring and removed each fall.

The concrete sidewalk and seasonal boardwalk initially brings visitors to the steep bluff face approximately 450 feet above Lake Michigan. Despite signs warning visitors of the steep drop to Lake Michigan and the extremely exhausting return climb, many frequently descend the bluff face. Unfortunately, many of these visitors are injured either during the descent due to missteps or falls or during the ascent from overheating or exhaustion. Rescue operations by park staff or local fire and rescue crews are often required to assist these visitors.

The intense foot traffic in this location has caused considerable erosion of the bluff face. In addition to the potential for personal injury, this erosion has impacted the dune habitat and creates a visual intrusion in the viewshed. Since 1986, when the parking area and overlooks were constructed, a variety of techniques have been employed to protect the resource and keep visitors on the trails. These techniques included boardwalks, boardwalks with rails, sand ladders, posts with cables, posts with ropes, and signage. Attempts to restore the perched dune south of Overlook 9 using special "sand fencing" with biodegradable baling twine have been moderately successful. The current configuration of the path and overlooks requires ongoing maintenance from the park staff. This maintenance is becoming prohibitively difficult and expensive because of the blowing and drifting sand. The park spends roughly \$10,000 per year on sand removal and boardwalk at this site. In addition, park staff have been injured during the installation and removal of the boardwalks and during sand removal activities.

The following issues were identified by the planning team regarding the need to improve Overlooks 9 and 10 and the surrounding area:

- Heavy visitor use from hiking up and down the bluff face has accelerated natural forces, resulting in severe erosion. A trough on the bluff face has formed from decades of intense foot traffic.

- Vegetation at the top of the perched dune has also been impacted from heavy, unregulated foot traffic.
- Every year, more visitors are injured at this site than anywhere else in the Sleeping Bear Dunes. Visitors suffer from heat exhaustion, lacerations or broken bones. Park employees and local fire and rescue departments respond to these incidents, incurring considerable costs in time, money, and personal safety.
- Yearly maintenance costs at the site are high. Due to high winds in the area, sand must be removed from the seasonal boardwalks frequently, either by hand or bulldozer, sometimes daily.
- Due to the loose, rounded beach sand on the seasonal boardwalks and concrete approach walks, they are sometimes very slippery. Removal and placement of the seasonal boardwalks also has resulted in maintenance worker injuries.
- The existing situation does not provide an unimpacted natural setting for viewing one of the park's premier natural attractions. The eroded slope, impacted vegetation, and high numbers of visitors descending and ascending the bluff face detract from the experience for many park visitors.

The *General Management Plan* (NPS, 2009) provides a general framework to guide park management decisions over a 20-year period. The project to improve the Lake Michigan Overlooks 9 and 10 represents a continued commitment to preserve significant park resources and is compatible with management zoning in the General Management Plan (GMP). The project area lies within the "High Use" zone, which allows for high numbers of visitors, major developments, and a modified natural environment. This project was specifically addressed in the GMP in the section entitled "Ongoing Projects and Projects Planned for the Near Future."

The following objectives were identified during the planning process:

- Provide visitors access to the panoramic view of the natural environment with little visible visitor impact.
- Access to Overlook 9 is fully accessible under the requirements of the Americans with Disabilities Act (ADA)
- Provide visitors with a quality interpretive experience.
- Restore the site and reduce or eliminate future impacts to the bluff face and the perched dune from visitor use.
- Reduce or eliminate injuries to visitors on the bluff face.
- Reduce or eliminate park staff or local fire and rescue crew response costs.
- Reduce or eliminate injuries to maintenance employees.
- Reduce maintenance costs.

SELECTED ALTERNATIVE

The selected alternative includes elements of all alternatives described in the EA. The selected alternative includes construction of either a raised boardwalk (as in Alternative C, described below) or a tunnel (as in Alternative D, described below), on the perched dune, to connect the existing parking area with the new overlook platform. Since the impacts from construction of a raised boardwalk or tunnel are nearly identical, as described in the EA narrative and Table 2-2, the park will select the final design on factors other than environmental, such as cost, practicality, or feasibility. The identification of additional environmental concerns, however, may result in additional environmental analysis. A future decision memorandum will identify the selected design.

If a raised boardwalk is designed, as described in Alternative C, the existing paved parking lot would remain, but a new access path to the overlooks would be provided. The existing concrete path leading from the parking lot to the dune would be removed. A series of switchbacks, or some other design to reduce the slope, would be constructed where the existing concrete sidewalk is currently located. This section of boardwalk would lead to a new overlook platform.

If a tunnel is designed, as described in Alternative D, the existing concrete sidewalk from the parking lot would be maintained, providing access to a pedestrian tunnel constructed through the perched dune. The tunnel should greatly reduce sand removal activities in this sand accumulation problem area. Sand would accumulate on top of the tunnel and the natural dynamic process of sand deposition and removal would continue. The tunnel exit at the new overlook platform would be constructed at a level high above the perched dune to substantially reduce sand drifting into the tunnel or onto the overlook platform. Also, an enclosure of suitable materials would be placed across the tunnel opening in the fall to prevent sand deposition during the winter. The tunnel exit would be at a new raised overlook platform.

From the new overlook platform, an elevated boardwalk would cross the top of the bluff face leading to Overlook 9 (as in Alternatives C and D). Overlook 9 would be reconstructed in its existing location (as in Alternatives C and D). The objective of the route to Overlook 9 would be that it is fully accessible under the requirements of the American with Disabilities Act (ADA). The ability to fully comply with the requirements of ADA would be further examined during final design.

The existing trail would access Overlook 10 from Overlook 9. Overlook 10 would be reconstructed in its location, simultaneously with the reconstruction of Overlook 9. No new trails are proposed from the existing parking area to Overlook 10.

MITIGATION MEASURES FOR THE SELECTED ALTERNATIVE

Since construction will be completed sometime in the future, a number of activities will be initiated in the interim:

- A new sign or signs will be installed at the site to clearly describe the resource and safety concerns with climbing the bluff.
- Additional educational materials will be developed.
- The depth and width of the trough on the bluff, as well as other resource damage will be monitored.
- Visitor counts of bluff climbers will be taken.
- Formal closure of the bluff may be made at any time, based on resource or safety considerations.

ADDITIONAL CONSIDERATIONS

- Restroom facilities will be analyzed to determine the best method of providing this service. The possibility of replacing the existing vault toilets with flush toilets is described in the “Cumulative Impacts” section of the EA on page 39. Additional environmental analysis may be needed in the future should new restrooms be proposed.
- The existing parking area will be analyzed to determine if future expansion is necessary. This activity is not described in the EA, so additional environmental analysis may be needed in the future should a parking area expansion be proposed.

OTHER ALTERNATIVES CONSIDERED

No Action (Alternative A): Under Alternative A, park staff would continue with the current management of Overlooks 9 and 10. Routine maintenance would occur as needed. Some of the pilings at existing Overlook 9 are becoming exposed and it is anticipated that major repairs (or replacement) would be required at some point in the future to stabilize the structure. The route to Overlook 9 is not fully accessible under the requirements of the Americans with Disabilities Act (ADA). It is, however, accessible with assistance, due to steep slopes and sand. The boardwalk to Overlook 10 is also accessible with assistance, but the overlook platform is not accessible due to a step.

Alternative B (Close Bluff Climbing Area with Barrier): Under Alternative B, the existing site use and configuration would remain. The existing concrete sidewalk would remain and the seasonal boardwalks would continue to be used. The existing Overlooks 9 and 10 would also remain in their current locations.

This alternative would differ from the No Action Alternative in that the bluff climbing area would be officially closed and signed. Barriers such as post-cable or fence would be erected to discourage visitors from accessing the bluff face.

Routine maintenance would occur as needed. Some of the pilings at existing Overlook 9 are becoming exposed and it is anticipated that major repairs (or replacement) would be required at some point in the future to stabilize the structure. The seasonal boardwalks would need to be maintained as indicated for the No Action Alternative. This alternative would also require maintaining the barriers and signage for the closure and also increase staff for patrolling the area to ensure that visitors are complying with the closure.

As in Alternative A, the route to Overlook 9 is not fully accessible under the requirements of the ADA. It is, however, accessible with assistance, due to steep slopes and sand. The boardwalk to Overlook 10 is also accessible with assistance, but the overlook platform is not accessible due to a step.

Alternative C (Boardwalks to Overlook 9 and New Path to Overlook 10 Using Trails, Steps, and Boardwalk): Under Alternative C, the existing paved parking lot would remain, but a new access path to the overlooks would be provided. The existing concrete path leading from the parking lot to the dune would be removed.

A permanent boardwalk would delineate the trail to the existing Overlook 9. A series of switchbacks would be located where the existing concrete sidewalk is located. This section of boardwalk would lead to a new overlook platform. From this overlook, an elevated boardwalk would cross the top of the bluff face. The boardwalk would be located on the edge of the bluff face leading to Overlook 9. Overlook 9 would be reconstructed in its existing location.

The new path to Overlook 10 would start at the northern end of the parking lot and proceed through the woods. The initial portion of the path would be parallel to the road. Steps would be used to get over the slope connecting to a boardwalk to cross over a low spot in the dune. Elevated boardwalks would be used to cross the low spot, allowing sand to move underneath the structure. The boardwalk would connect to a path across the top of the dune to reach Overlook 10. The path would use cable/post and sand ladders as needed to delineate the trail. Routine maintenance to Overlook 10 would occur as needed.

In Alternative C, it is intended that the route to Overlook 9 would be fully accessible under the requirements of the ADA. The ability to fully comply with the requirements of ADA would be further examined during final design. The route to Overlook 10 would not be accessible under the ADA

guidelines and would offer a more strenuous climb including a trail, steps, raised boardwalk and sand ladders.

Alternative D (Tunnel with Reconstructed Overlook 9 and trail to Overlook 10): Under this alternative, the existing concrete sidewalk from the parking lot would be maintained providing access to a pedestrian tunnel constructed through the perched dune. From the entry, the tunnel would head in a northwest direction and exit at a new overlook platform. The new overlook platform would connect to an elevated boardwalk that would cross the top of the bluff face leading to a newly-constructed Overlook 9. As with Alternative C, Overlook 9 would be reconstructed in its existing location.

The tunnel should greatly reduce sand removal activities in this sand accumulation problem area. Sand would accumulate on top of the tunnel and the natural dynamic process of sand deposition and removal would continue. The tunnel exit at the new overlook platform would be constructed at a level high above the perched dune to substantially reduce sand drifting into the tunnel or onto the overlook platform. Also, an enclosure of suitable materials would be placed across the tunnel opening in the fall to prevent sand deposition during the winter. The raised boardwalk from the new overlook platform to Overlook 9 would be constructed high enough above the bluff to eliminate most sand accumulation on the boardwalk walking surface. And, pilings for the raised boardwalk, the new overlook platform, and the new Overlook 9 would be driven deep enough to allow for any changes in bluff elevations during the life of the developments.

Overlook 10 would remain open and routine maintenance would occur as needed. A new path to Overlook 10 would be constructed through the woods, starting at the northern end of the parking lot. The path would use cable/post and sand ladders as needed to delineate the trail. The path would be located predominately in the forested dunes, ascending the slope and requiring minimal earthwork.

In Alternative D, the route to Overlook 9 is intended to be fully accessible under requirements of ADA. The ability to fully comply with the requirements of ADA would be further examined during final design. The route to Overlook 10 would not be accessible under ADA and would offer a more strenuous climb along a rustic trail.

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)). This includes alternatives that:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
2. Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Generally, 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).

Continuing the current conditions under Alternative A, the No Action Alternative, would not preserve the natural aspects of the dunes and the bluff face. The current conditions provide access to the dunes and the views associated with Lake Michigan, however, this has resulted in unintended consequences. Visitors continue to descend and ascend the bluff face, creating an eroding trough. The use of the seasonal boardwalks requires the use of heavy equipment to prepare the dunes and then maintain the boardwalks once they have been installed.

Alternative B would formally close access to the bluff face while maintaining access to Overlooks 9 and 10. Barriers would be constructed. Visitors would still access Overlooks 9 and 10 along the same seasonal boardwalks. However, this area could not be patrolled all the time making it difficult to ensure no visitors were descending the bluff face. Also, sand would still accumulate on the boardwalks, requiring frequent maintenance.

Alternative C would involve the construction of a new boardwalk leading to Overlook 9. The construction of the boardwalk would require excavation in the area of the perched dune to create an acceptable slope for the boardwalk. This area would be stabilized and revegetated using native species following construction; however, the dune would be impacted for construction of the boardwalk. Through design, visitors would be discouraged from climbing the bluff face as was possible under Alternative A.

Alternative D would involve the construction of a tunnel, beginning at the existing path from the parking lot. The tunnel and the boardwalk leading to new Overlook 9 would restrict access to the bluff face through design. Construction and installation of the tunnel would involve open cuts through the perched dune. The area of construction would be backfilled with stockpiled soils and then revegetated with appropriate native species.

Alternatives C and D would both provide new access to Overlooks 9 and 10, reduce injuries that occur on the bluff face through reduced access, reduce rescues, reduce injuries to maintenance employees, and reduce maintenance costs. Alternatives C and D would result in short-term impacts to the dune environment during construction, but would provide greater protection to natural resources in the long-term.

The selected alternative would provide new access to Overlook 9, reduce injuries that occur on the bluff face through reduced access, reduce rescues, reduce injuries to maintenance employees, and reduce maintenance costs. The selected alternative would result in short-term impacts to the dune environment during construction of either the raised boardwalk or tunnel, but would provide greater protection to natural resources in the long-term. Additionally, the selected alternative does not include a new trail to Overlook 10, as described in Alternatives C and D, so impacts associated with that development and use would not occur.

Overall, the selected alternative is the one that causes the least damage to the biological and physical environment in the long-term and would best preserve, protect, and enhance natural resources. It is the environmentally preferable alternative.

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 geology and soils. Between the parking area and the bluff, construction of either a raised boardwalk system or a tunnel would require excavating the perched dune in that location. Immediately following construction, however, the site would be restored. Construction of the new overlook platform, raised boardwalk, and new Overlook 9 would require heavy equipment movement on the perched dune and bluff, and supporting posts driven into the bluff. In the long-term, however, impacts would be negligible. The raised boardwalks and overlooks would allow sand movement underneath these structures and, with the tunnel design, sand movement above the structure. The greatly reduced visitor climbing on the bluff, along with NPS restoration activities, will allow that section to begin to be restored. Minor adverse short-term impacts to vegetation will occur, particularly in the area between the parking area and the bluff. Some trees and other dune vegetation will be removed. However, this site will be immediately revegetated with native species. Any impacts will be offset by the protection of adjacent vegetated areas that have been impacted by visitor use. Reducing foot traffic on the bluff, shoreline, and areas adjacent to the boardwalk would result in long-term negligible beneficial impacts to threatened and endangered species. Improved facilities that work better with the bluff and dune environment, along with a reduction in rescues, would result in long-term moderate beneficial impacts. The selected alternative would deter most bluff climbing, a moderate adverse impact to those visitors wishing to climb. Offsetting this impact, however, is an action that satisfies most project objectives: safe access to one of the most panoramic views in the Lakeshore, site restoration and preservation, reduced visitor injuries and rescues, and reduced rescue costs.

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

One of the objectives of the project is to reduce or eliminate injuries to visitors on the bluff face. The selected alternative includes design components (raised boardwalks, raised overlooks, and/or a tunnel) that will deter uncontrolled climbing on the bluff.

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 historic or cultural resources, prime farmlands, or wild and scenic rivers in the project area. The Federally-threatened Pitcher's thistle has been found in the project area. The project lies within piping plover critical habitat, but individual piping plovers have not been observed. The project also lies within a designated critical dunes area, administered by the Michigan Department of Environmental Quality under Part 353, Sand Dunes Protection and Management.

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

During the public review period (June 1- July 6, 2009) and the June 17, 2009 public open house, 134 comments were received from individuals, groups, and government agencies. The bulk of commenters were fairly evenly split between continuing bluff climbing and prohibiting it. Many commenters wanted the NPS to charge for rescues. Many commenters were against the tunnel option, principally because of the construction costs.

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 and public meeting. Design and engineering challenges, however, were identified during the process due to the unique characteristics of the site.

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:

Other past, present, and reasonably foreseeable future management activities at the Lakeshore and in the surrounding region include: Improvements to parking areas—ends of Leelanau County Roads 651 and 669 (past), Dune Climb Parking Area—paving and other minor improvements (past), Glen Haven Village improvements (current), designation of highways M-22 and M-109 as a Michigan State Heritage Route (past), the Leelanau Scenic Heritage Route Trailway (current), Michigan Department of Transportation road widening on M-22 (future), and possibly replacing the vault toilets at the project location with flush toilets (future).

Long-term cumulative impacts to soils and geology are negligible and adverse; to vegetation are negligible and beneficial; to park facilities and operation are negligible and beneficial; and to visitor use and experience are moderate and beneficial. There are no cumulative impacts to threatened and endangered species.

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.

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. The USFWS has identified three threatened and endangered species within the Lakeshore: the endangered piping plover (*Charadrius melodus*), the endangered Michigan monkey flower (*Mimulus glabratus* var. *michiganensis*), and the threatened Pitcher's thistle (*Cirseum pitcheri*). Additionally, the breeding range of the Indiana bat (*Myotis sodalists*) occurs within the southern half and western coastal counties of the Lower Peninsula of Michigan, including Benzie and Leelanau Counties. However, even with suitable habitat in the National Lakeshore (highly variable forested landscapes in riparian, bottomland, and upland areas that have roosting trees with crevices or exfoliating bark), this species has not been confirmed within the Lakeshore.

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, but the project area lies within the USFWS designated critical habitat, which follows much of the Lake Michigan shoreline inward 1,640 feet (500 meters).

In a July 6, 2008 letter, USFWS concurred with our determinations that: 1) the impacts to piping plover are discountable and not likely to adversely affect this species, 2) the impacts to piping plover critical habitat are insignificant and not likely to adversely affect it, and 3) the impacts to Pitcher's thistle are insignificant and beneficial.

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.

IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the selected alternative will not constitute an impairment to National Lakeshore resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the project's environmental assessment, the agency and public comments received, and the professional judgment of the decision-maker guided by the direction in *2006 NPS Management Policies*.

PUBLIC INVOLVEMENT

Coordination and public participation was initiated early in this project. Public participation began with scoping letters that were sent in November 2006 to affiliated Indian tribes, resource and regulatory agencies, the Michigan Department of Transportation, interest groups, and the public. A press release was issued on November 16, 2006 requesting public input and information was posted on the National Park Service Planning, Environment, and Public Comment (PEPC) website. A total of 11 comments were received, two from agencies and nine from the public.

The EA was placed on public review from June 1-July 6, 2009. A press release was issued on June 1, 2009, stating that the document could be reviewed on the park's website, with a link to PEPC, and paper copies were available at village and township offices and area libraries. A public open house was held at the National Lakeshore's Visitor Center auditorium on June 17, 2009.

134 comments were received during the formal public comment period, including the U.S. Fish and Wildlife Service (USFWS), Michigan Department of Natural Resources (MDNR), Glen Arbor Fire Department, and National Parks Conservation Association (NPCA). Letters received after the end of the July 6, 2009 formal public review period included the Michigan Department of Environmental Quality (MDEQ), on July 20, 2009, and Glen Arbor Township, on August 20, 2009. No letter was received from the State Historic Preservation Office, as expected, since there are no cultural or historic resources in the project area.

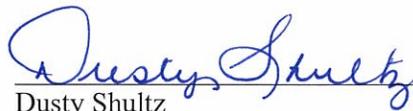
USFWS, in a July 6, 2008 letter, concurred with our determinations that: 1) the impacts to piping plover are discountable and not likely to adversely affect this species, 2) the impacts to piping plover critical habitat are insignificant and not likely to adversely affect it, and 3) the impacts to Pitcher's thistle are insignificant and beneficial. MDNR concurred in part with Alternative D, but stated that access to the bluff face should remain open to preserve the "challenge of the climb." The Glen Arbor Fire Department preferred Alternative D, but was concerned about access for rescue personnel should the need arise. NPCA also agreed with the Alternative D concept. MDEQ was unclear as to the NPS objective for this project and concerned about the level of aesthetic and resource impact from construction of a tunnel. They suggested that trails, stairs, and platforms on the dune would be less obtrusive. They also encouraged exploration of an alternative design, especially if ADA requirements are an issue. Glen Arbor Township unanimously supported Alternative B, to install a barrier and prevent bluff climbing all together.

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

10-28-2009

Date

Approved:

for



Ernest Quintana

Midwest Regional Director

11/2/09

Date

ERRATA SHEET

While the environmental assessment included an estimate of annual maintenance costs in Appendix B, we inadvertently omitted an estimate of construction costs. This estimate was provided in the presentation at the June 17, 2009 public open house:

ALTERNATIVE	ESTIMATED CONSTRUCTION COST
A (No Action)	\$100,000 - \$150,000
B	\$125,000 - \$150,000
C	\$1.0 million - \$1.2 million
D	\$900,000 - \$1.0 million