FINDING OF NO SIGNIFICANT IMPACT

Fire Management Plan
Sleeping Bear Dunes National Lakeshore

Background

Sleeping Bear Dunes National Lakeshore (Lakeshore) was established by Public Law 91-479 on October 21, 1970. This Act states that: "Congress finds that certain outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena, exist along the mainland shore of Lake Michigan and on certain nearby islands in Benzie and Leelanau Counties, Michigan."

Congress protected these outstanding natural features in perpetuity as a unit of the national park system, managed by the National Park Service (NPS). The Act further declared that these features should be: "preserved in their natural setting and protected from developments and uses which would destroy the scenic beauty and natural character of the area." To carry out this preservation and protection, Congress directed the Secretary of the Interior to: "administer and protect the Sleeping Bear Dunes National Lakeshore in a manner which provides for recreational opportunities consistent with the maximum protection of the natural environment within the area."

The Lakeshore contains over 70,000 acres of land and water, including two islands (North and South Manitou) a combined 20,000 acres in size, and about 11,000 acres of Lake Michigan waters, as well as scenic beaches, dunes, beech/maple forests, lakes, and streams. The park's striking landforms were shaped by the vast glaciers that blanketed the area thousands of years ago during the Pleistocene Era, as well as by melt water from these glaciers and subsequent wind erosion. These landforms include the beaches, moraines, dunes, perched dunes, kettles, truncated headlands, drainage channels, embayment lakes, streams, bogs and springs. Each landform has its own characteristic vegetative cover and corresponding wildlife resources. Former land uses and resource exploitation or extraction, such as gravel pits, dumps, farming, logging, and grazing, have all impacted the Lakeshore's landforms and vegetative cover.

Noteworthy fauna that occur in the Lakeshore include the endangered Piping Plover that nests on the beaches, the threatened Bald Eagle that both passes through and nests at the Lakeshore, and the Upland Sandpiper, which nests in open fields and is considered a rare species in Michigan. Other grassland-nesting birds include the Savannah Sparrow, Grasshopper Sparrow, Vesper Sparrow and Bobolink, which are in nationwide decline but are stable or increasing in the Lakeshore because of the absence of agriculture and grazing, and the open field management plan, which protects the habitat for meadow-dwelling wildlife. Prairie Warblers, a Michigan endangered species, have excellent habitat in the pine/juniper vegetation behind the beaches. In addition, the Lakeshore is used by ducks and geese that nest in the small lakes and ponds; it also provides habitat for owls and hawks, as well as for such mammals as badgers, river otters, fox, mink, flying squirrels and many others.

The Lakeshore contains rare orchids and ferns, a grove of giant white cedar trees on South Manitou Island, and an array of plants of special interest including the federally listed threatened Pitcher's thistle and endangered Michigan monkey-flower.

The Lakeshore has had a draft Fire Management Plan (FMP) dating to 1989, but evolution in Federal fire policy since that time necessitates a change in the park's FMP. The 1995 Final Report of the Federal Wildland Fire Management Policy and Program Review provided guiding principles that are fundamental to the success of the Federal wildland fire management program and implementation of review

recommendations. These recommendations include Federal wildland fire policies in the areas of: safety, planning, wildland fire, prescribed fire, preparedness, suppression, prevention, protection priorities, interagency cooperation, standardization, economic efficiency, wildland/urban interface, and administration and employee roles. The 2001 Federal Fire Management Policy update addresses 17 distinct items, the foremost being safety; all FMPs and activities must reflect this commitment.

The Proposed Action is the development, approval and implementation of an FMP at the Lakeshore. An environmental assessment (EA) was prepared to better understand the direct, indirect and cumulative environmental effects associated with three possible alternative FMPs at the Lakeshore: 1) No Action (Suppress All Wildland Fire and Exclude Prescribed Fire); 2) Suppress All Wildland Fires But Permit Prescribed Fire; and 3) Suppress All Wildland Fires On Mainland, Allow Wildland Fire Use (WFU) on Manitou Islands, Permit Prescribed Fire. Environmental issues identified during scoping and evaluated in the EA included geology and soils, water resources, floodplains and wetlands, air quality, vegetation, wildlife and fisheries, threatened and endangered species, proposed wilderness, noise, cultural resources, land use, socioeconomics, human health and safety, public services, park facilities and operations, and visitor use and experience.

Preferred Alternative

The National Park Service's preferred alternative is #3 – Suppress All Wildland Fires on Mainland, Allow WFU on Manitou Islands, Permit Prescribed Fire. Under Alternative 3, all wildland fires on the mainland would continue to be suppressed, as in Alternatives 1 and 2. However, on North and South Manitou Islands, wildland fire use would be permitted. Prescribed fire would be allowed and utilized on both the islands and the mainland. Two fire management units (FMUs) would be designated at the Lakeshore – the Island Unit and the Mainland Unit. WFU would be permitted on the Island Unit but not the Mainland Unit. As in the case of Alternative 2, Alternative 3 would also incorporate current national fire policy guidance and the National Fire Plan of 2000.

This alternative is described in detail in the EA.

Other Alternatives Considered

Alternative 1 (No Action) – This alternative would continue the present practice of suppressing all wildland fires throughout the park, including both Manitou islands. It would not allow the use of prescribed fire or WFU. Rather, all naturally and human-ignited fires both on the mainland and the Manitou Islands would be declared unwanted wildland fires and be subjected to appropriate suppression actions. In the No Action Alternative, one FMU would cover the entire Lakeshore.

Alternative 2 (Suppress All Wildland Fires but Permit Prescribed Fire) – Alternative 2 would also suppress all lightning and human-ignited wildland fires. Similarly, one FMU would cover the entire park. However, in contrast to Alternative 1, Alternative 2 would actively utilize prescribed fire for both hazard fuel reduction and natural and cultural resources management. Alternative 2 would also incorporate current national fire policy guidance. The National Fire Plan of 2000 embodied the philosophical changes in fire policy and outlined four major goals. These included: Improve Prevention and Suppression; Reduce Hazardous Fuels; Restore Fire Adapted Ecosystems; and Promote Community Assistance.

Environmentally Preferred Alternative

The preferred alternative, Alternative 3, is also the environmentally preferred alternative. The environmentally preferred alternative is the alternative that will promote the national environmental

policy as expressed by §101 of the National Environmental Policy Act (NEPA). 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; and

6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In essence, the environmentally preferred alternative would be the one(s) that "causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (*NPS Management Policies 2001*).

In this case, the preferred alternative is the environmentally preferred alternative for the new Fire Management Plan for the Lakeshore, since it comes the closest to meeting goals 1, 2, 3, 4 and 6 above. Under this alternative, a combination of 1) prescribed fires on both the mainland and the Manitou Islands for hazard fuel reduction and ecological restoration, 2) wildland fire use for hazard fuel reduction and ecological restoration on the Manitou Islands only, and 3) fire suppression, will all be used to protect human life and property, reduce hazard fuels in the park, restore ecological processes, maintain native plant communities, and improve wildlife habitat. Finally, this alternative best protects and helps preserve the natural and cultural resources in the Lakeshore for current and future generations.

The Preferred Alternative and Significance Criteria

As defined at 40 CFR §1508.27, from the regulations of the Council on Environmental Quality (CEQ) that implement the provisions of NEPA, significance is determined by examining the following criteria:

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.

There are overall benefits to the human and natural environment at the Lakeshore from the proposed action. The preferred alternative, in particular, would have positive effects on the health and safety of the park's visitors, staff, and neighboring residents, on its facilities and infrastructure, and on its vegetation communities, landscapes, wildlife habitat and populations, and threatened and endangered species. However, the preferred alternative does entail potential adverse impacts on a number of resource areas, including soils, water quality, floodplains and wetlands, air quality, proposed wilderness, noise, cultural resources, land use, public services, human health and safety, and visitor use and experience. These

impacts range from localized to regional, and from temporary to long-term. None, however, rise to the level of significant.

Periodic burning of fire-evolved components of the northern hardwoods forest ecosystem is an important aspect of maintaining a healthy forest. The partial restoration of the historic fire regime at the Lakeshore would enhance the variety and diversity of native plant species and wildlife habitats, while at the same time helping somewhat to control noxious weeds. Plant communities adapted to higher frequency, low-severity fires would be favored with prescribed fire and WFU, and hazard fuels would be reduced (both surface and ladder fuels). Prescribed fire and WFU would also have the beneficial effect of releasing nutrients into the soil. Fires and related suppression activities could expose more soils to temporary or short-term erosion and to chemical fire suppressants and retardants, an adverse effect both for soils and water resources. These effects are considered to be localized, short-term and minor and not significant impacts.

The EA also discusses the negligible to moderate impacts on air quality associated with the preferred alternative. The Lakeshore enjoys generally good air quality at present. It is located in a Class II area for air quality, which receive the next highest protection (after Class I areas) under the 1977 Clean Air Act Amendments. WFU, wildfires and prescribed fires would all impinge to some extent on air quality, though not in any significant, sustained way. These impacts would be temporary and short-term during any one episode. Noise impacts from suppression and fuel reduction activities in proposed wilderness areas are also temporary, localized, and negligible to minor over the long term.

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

When conducting fire management activities, human health and safety is the primary concern. The preferred alternative provides the best protection both for firefighters and the public at large since prescribed fire and mechanical thinning will help reduce hazard fuels near developed areas in the park and at its edges and minimize the fire danger to the NPS staff, visitors, and nearby private residences and communities. There would likely be very minor human health and safety impacts (small cuts and bruises) to firefighters resulting from wildland fire suppression and prescribed fire and thinning activities. Before conducting any prescribed fire, fire management officials would ensure that adequate weather conditions existed to facilitate smoke dispersion, thus minimizing and/or eliminating potential smoke impacts on sensitive receptors and the general public.

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.

As described in the EA, the intent of the action alternatives is to provide the maximum amount of protection for the important natural and cultural resources of the Lakeshore. The implementation of the preferred alternative would result in no significant adverse effects to known cultural resources (including archeological, historic, and ethnographic ones) since these would be identified, marked and avoided during fire management activities. The preferred alternative will have a long-term, moderately beneficial impact on the northern hardwoods forest ecosystems, since fire is crucial to the maintenance and perpetuation of the fire-evolved components of this ecosystem.

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

No controversial impacts were identified during the analysis done for the EA, and no highly controversial issues were raised during the public review of the EA . During public scoping and public review of the

EA, some members of the community raised concerns about the potential to endanger people and adjacent private property from prescribed and wildland fires that escape control. Some concern was also expressed about the practice of wildland fire use for resource benefit and whether it was safe and appropriate given the circumstances that prevail at the Lakeshore (i.e. the narrow configuration of the Lakeshore, numerous inholdings, and numerous developed properties abutting the Lakeshore). However, based on widespread experience around the United States, the EA analysis concludes that the preferred alternative – a combination of unwanted wildland fire suppression, prescribed fire and mechanical clearing on the mainland and these same actions plus WFU on the islands – actually reduces the risk to people and property posed by the status quo. Under the status quo, designated the No Action Alternative (#1) in the EA, the uninterrupted accumulation of hazard fuels increases the risk of damaging, dangerous wildland fires. Also, WFU would not be practiced on the mainland, but only on the Manitou Islands and only within prescription, that is, only when a given wildland fire does not pose a risk to park values, private property and human beings.

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

The EA analysis and public review identified no risks associated with the preferred alternative that are unique or unknown, nor effects associated with the preferred alternative that are highly uncertain. Fire managers cannot always predict the precise outcome of wildfire or even prescribed fire, nor provide 100 percent assurance whether and when damage to property would occur under the preferred alternative, or either of the other two alternatives for that matter. However, it can be stated confidently that the proactive strategies associated with the preferred alternative reduce the long-term risk to life and property. Similarly, though botanists and fire ecologists may not be able to predict the precise outcome of fire on a given vegetation community, they have a broad understanding of the range of possible successional pathways that may result from a fire of a particular size and intensity, and they are continually refining this knowledge. Proposed fire effects monitoring will help ensure that NPS fire and resource management staff continue to learn about the functioning of this ecosystem from their interventions, in keeping with the principles of adaptive resource management.

The 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 preferred alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to develop a fire management plan and program that minimizes the danger posed by hazardous fuel accumulations to human health, safety, and improved properties, while recognizing the proper ecological role of fire in the management of the Lakeshore's plant communities and wildlife habitat. Under such a program, mechanical thinning, and subsequently, prescribed burning activities would be conducted in phases over a number of years to reduce hazard fuels and improve ecological health of communities at the Lakeshore. The effects of this program will be evaluated and, if necessary, the program will be revised during future revisions to the Lakeshore's FMP.

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

Since the vegetation communities of the Lakeshore are expected to thrive under a management regime that includes fire, the application of prescribed fire on a judicious basis and the allowance for wildland fire use for resource benefits (on the Manitou Islands only) will cumulatively improve the health and diversity of the northern hardwoods forest ecosystem present within the Lakeshore. Similar efforts

underway by other federal and state public land managers in Michigan, Wisconsin, Minnesota, Ontario, Canada, and throughout much of the Upper Midwest, will expand the geographic extent of these cumulative beneficial impacts on forest composition and structure.

There are not expected to be any adverse cumulative effects from the proposed action, except possibly on air quality if the use of prescribed fire in the Upper Midwest were to expand significantly. In any case, the EA determined that there would be no significant cumulative impacts on any resources associated with the preferred alternative.

The 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.

More than 350 historic structures in the Lakeshore are eligible for the National Register of Historic Places. The preferred FMP alternative includes a number of mitigation and avoidance measures to protect these irreplaceable resources and other historic structures, archeological sites, and ethnographic resources that may await discovery.

NPS has complied with Section 106 of the National Historic Preservation Act, to the extent possible at present, by providing a copy of the draft FMP and preliminary draft EA to the Michigan State Historic Preservation Office (SHPO) On October 4, 2004. On October 25, 2004, the SHPO responded, in writing, that this project will have "no adverse effects" on the Lakeshore.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The Lakeshore sent the East Lansing Field Office of the U.S. Fish and Wildlife Service (USFWS) a copy of the draft FMP and preliminary draft EA on October 4, 2004. The USFWS returned a letter, dated October 27, 2004, with comments that needed to be addressed before their office could provide concurrence. The noted items were addressed and a revised EA was submitted to the USFWS on January 20, 2005. The USFWS concurred with the NPS on March 1, 2005, stating that two animals and two plants – the Bald Eagle, Piping Plover (including Piping Plover critical habitat), Michigan monkey-flower and Pitcher's thistle – were the only federally listed species found in the park. Under Section 7 of the Endangered Species Act, the USFWS also concurred with the NPS determination that the proposed action is not likely to adversely affect Bald Eagle and Pitcher's thistle, and would have no effect on Michigan monkey flower, Piping Plover, and Piping Plover critical habitat.

Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.

This action violates no federal, state, or local environmental protection laws.

Impairment

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the proposal will not constitute an impairment to the critical resources and values of the National Lakeshore. This conclusion is based on a thorough analysis of the environmental impacts described in the Fire Management Plan EA, public comment, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in *NPS Management Policies 2001*. The plan under the preferred alternative will result in minor to, at most, moderate adverse impacts to air

quality resources, primarily in the form of temporary smoke, and to proposed wilderness, primarily from elevated noise levels for relatively brief periods. Overall, the proposed FMP results in benefits to Lakeshore resources and values, opportunities for their enjoyment, and it does not result in their impairment.

Public Involvement

Lakeshore Natural Resource Management staff began scoping for the EA on updating the Lakeshore's Wildland FMP on March 19, 2002, with a letter and press release. The letter was mailed to approximately 60 addressees, including elected officials; Federal, Tribal, state and local government agencies; non-governmental organizations, the news media, and park use and occupancy tenants. The news release went to about 30 news media outlets. The letter and news release requested comments on issues that should be addressed in the new FMP and draft EA and suggestions on possible ways to manage the park's fire management program. Persons and parties interested in commenting in writing were requested to have their letters postmarked no later than April 22, 2002.

In addition, the news release and letter informed stakeholders that the Lakeshore would hold a scoping meeting open to the public on the evening of April 10, 2002 at the Lakeshore visitor center in Empire, Michigan. This meeting was held on schedule and attended by approximately 25 members of the public, a reporter from the Traverse City *Record-Eagle*, and officials from the Michigan Department of Natural Resources (MDNR). A number of comments were made at the meeting and sent in afterwards. Also, a newspaper article appeared in the *Record-Eagle*.

The environmental assessment was made available for public review and comment during the period, January 14, 2005 to February 24, 2005. It was then extended due to public request, until March 26, 2005. On January 14, 2005, a letter announcing the EA availability was sent to over 120 contacts on the Lakeshore's mailing list. A news release announcing its availability was sent to the media outlets on January 18, 2005. A second news release was distributed on February 25, 2005, advising the public of the extension of the public comment period until March 26, 2005. A letter announcing the extension was mailed on February 25, 2005. The EA was placed on the Lakeshore's website and a copy was mailed to each of seven area libraries.

A meeting with local Fire Chiefs and MDNR staff was held on February 1, 2005. A public meeting was held at the Lakeshore visitor center in Empire, Michigan, on February 10, 2005, with seven people attending.

Fifteen comment letters and one recorded oral statement from the February 10, 2005 public meeting were received from the general public. Six federal, state, or local agencies replied: USFWS (Seney Wildlife Refuge), USFWS (East Lansing Field Office), Leelanau Conservation District (2), MDNR (Roscommon), and the Glen Arbor Township Fire Department. Comments were also received from Congressman Hoekstra and a representative from Senator Levin's office.

Conclusion

The preferred alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are generally negligible or minor in intensity, with the only moderate impacts being of temporary or short-term duration. There would likely be no significant impacts on public health, public safety, threatened or endangered species, land use and adjoining properties, sites or districts listed in or eligible for listing in the National Register of

Historic Places, or other unique characteristics of the region. No highly 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 proposed action and thus will not be prepared.

Recommended: _____

Superintendent Date
Sleeping Bear Dunes National Lakeshore

Approved: _____

Midwest Regional Director Date

Enclosures: EA Errata Sheet
Question and Answer Document