National Park Service
U.S. Department of the Interior

Katmai National Park and Preserve Alaska



Finding of No Significant Impact

Mink Island Cultural Resources Protection Project

August 2006

FINDING OF NO SIGNIFICANT IMPACT

Mink Island Cultural Resources Protection Project Katmai National Park and Preserve, Alaska July 2006

The National Park Service (NPS) has prepared an environmental assessment (EA) to evaluate alternatives for protecting the oldest known archeological site along the coast of Katmai National Park and Preserve (KATM). The purpose of this project is to (1) protect the site from winter storms and erosion from wave activity and (2) preserve the site resources for future investigations, if warranted.

The NPS has selected Alternative B – "Construct Rock Gabions and Sand Bag Revetment to Protect Mink Island Site." This alternative will involve construction of two tiers of rock-filled gabion baskets measuring 3 feet by 3 feet by 18 feet long to protect the face of an eroding archeology site and a sand bag splash guard above the gabions. This alternative will be implemented with mitigation measures described in the EA.

The NPS received no substantive comments on the EA and no additional information has been added to the EA. Thus no errata sheet has been prepared.

ALTERNATIVES

The EA evaluated two alternatives: Alternative A – the "no-action" alternative and Alternative B – "Construct Rock Gabions and Sand Bag Revetment to Protect Mink Island Site", the NPS preferred and environmentally preferred alternative.

Alternative A: No Action

Under this alternative, no new structures would be constructed. This alternative represents a continuation of the existing situation, which provides a baseline for evaluating the proposed action alternative. The no-action alternative is an environmentally neutral alternative because the existing situation has no impacts to the biological and physical environment that would likely continue without action. Significant adverse impacts to cultural resources would likely continue from erosion during winter storms. Alternative A would have negligible or no impacts on coastal resources, scenic quality, wilderness values, and wildlife and their habitat.

Alternative B: Construct Rock Gabions and Sand Bag Revetment to Protect Mink Island Site (The NPS and Environmentally Preferred Alternative SELECTED FOR IMPLEMENTATION)

Under this alternative, the NPS would construct in the archeological excavation cavity and failing slope above it a simple revetment system to protect the remaining archeology site from major storm events. The revetment would consist of a stepped galvanized steel gabion basket wall (18 feet [ft] long, 6 ft deep and 6 ft high), a sand bag splash guard, and large cobble footings. The wall would consist of 9 baskets each measuring 6 ft by 3 ft by 3 ft and tied securely

together with wire to form one solid unit. Should the gabion wall need to be secured to bedrock, hand drills and rock putty would be used to secure the structure. A sand bag spray apron would be placed on the failing slope behind the gabion wall, and a filter cloth or geotextile fabric would be placed under the sand bags and gabion wall to allow for drainage while protecting fine-grained sediments from erosion. Large local cobbles at least 6 inches in diameter would be placed at the toe of the gabion wall. The entire revetment system would be located above mean high tide and installed with hand labor using local beach rock and sand material from above mean high tide to fill the wire baskets and sand bags. The archeology site would remain stable and cultural deposits would be preserved for the future.

Alternative B would result in a mixture of positive and adverse impacts. The greatest long-term beneficial impact would be to protect the significant archeology site on Mink Island for posterity. There would also be local negligible to minor adverse effects to coastal resources, scenic resources, wilderness, and wildlife/habitat.

PUBLIC INVOLVEMENT

The EA had a 30-day public comment period beginning June 27, 2006 and ending July 27, 2006. Copies of the EA and a distribution cover letter were mailed or emailed to 64 federal, state and local government agencies, tribal entities, interest groups and individuals. The proposed project and EA were sent to 5 interested Native groups and 8 commercial use operators in the Amalik Bay coastal area. The NPS received comments from five parties on the EA, including one telephone comment from the U.S. Army Corps of Engineers (USACE), an email from the National Marine Fisheries Service (NMFS), and a letter from the Alaska Department of Natural Resources (ADNR) Coastal Management Program Office. USACE recommended the NPS contact its regulatory office early in the event any future stabilization work would be needed below the high tide line. The NMFS determined the described action would not result in any adverse effect to essential fish habitat (EFH) and further EFH consultation is not necessary. ADNR agreed with the NPS negative determination that the project would have no impacts on coastal resources.

The public comment received did not change the conclusions in the EA about the environmental effects of the action. No substantive comments were received, thus no errata sheet has been prepared.

DECISION

The NPS decision is to select alternative B, "Construct Rock Gabions and Sand Bag Revetment to Protect the Mink Island Archeology Site", which involves construction of rock-filled gabion baskets and a sand bag splash guard at the face of the exposed archeology site in August 2006, as fully described in the EA. This decision includes mitigating measures for cultural resources, coastal resources, scenic quality, wilderness, and wildlife.

MITIGATING MEASURES

The following mitigation measures apply to the selected Alternative B, "Construct Rock Gabions and Sand Bag Revetment to Protect Mink Island Site."

- 1. Cultural Resources. Should previously unknown cultural resources be identified during project implementation, work will be stopped in the discovery area and the NPS will perform consultations in accordance with 36 CFR 800.11. The resources will be evaluated to determine if they are eligible to be listed on the National Register of Historic Properties. To avoid adversely affecting eligible cultural resources, the NPS will execute a Memorandum of Agreement (MOA) with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Office that will incorporate comments from consulting parties. The MOA will specify measures to minimize or mitigate adverse effects. Furthermore, as appropriate, the NPS will abide by provisions of the Native American Graves Protection and Repatriation Act of 1992. Any artifacts recovered from park property at the project site will be accessioned, cataloged, preserved and stored in compliance with the NPS Cultural Resource Management Guidelines.
- 2. Coastal Resources. Rock and sand materials for the protective structures will be obtained from above mean high tide and across a broad area to minimize effects on coastal habitat and geological resources and function. Boards will be laid down to protect the surface from wheel barrow transport of rock and sand. The site will be monitored annually or biannually, as needed, to repair protective structures and to prevent erosion of the site and deposition of debris into the intertidal zone.
- **3. Scenic/Visual Quality.** Local rock and sand material will reduce visual intrusion from the structures, which will only be visible from foreground locations by parties traveling near the site. The gabion wire baskets and sand bags will be colored to match the surrounding rock and sand.
- **4. Wilderness.** The minor adverse effect to wilderness character and value will be mitigated from using a small crew of about 6 people and hand tools and labor during a limited period of time to construct the man-made rock gabion baskets and sand bag revetment. The size of the structure would be held at a minimum and phase 2 will only be constructed if deemed necessary after monitoring.
- 5. Wildlife. Project personnel will be instructed in techniques to avoid contact with brown bears and they will follow Katmai bear country operational guidelines. Nesting sites of bald eagles and shorebirds will be avoided and the project schedule occurs generally after birds fledge. Marine mammals such as sea lions, sea otters, and whales should not be adversely affected by the project, but project personnel will avoid disturbing these creatures during the natural foraging should they occur near the project.

Rationale for the Decision

The selected alternative satisfies the purpose and need for action in the following ways:

Alternative B will satisfy the purpose and need of the project, while Alternative A would allow negative impacts to cultural resources on Mink Island to continue. The greatest long-term beneficial impact would be long-term protection of the significant Mink Island Archeological Site, the oldest dated site on the Katmai Coast and the reason for establishment of the Amalik Bay Archeological District - National Historic Landmark. Minor adverse impacts may occur to local coastal resources, scenic quality, wilderness, and wildlife/habitat.

Compared with the selected Alternative B, Alternative A was rejected because it would result in continued negative impacts to the significant Mink Island Cultural Resources. Construction of the facilities under Alternative B will cost about \$20,000, but this is minor compared to the loss of an irreplaceable cultural resource.

The no-action was not selected for implementation because it would not satisfy the purpose and need for the action and would result in potential major loss of significant archeological resources at Mink Island.

Significance Criteria

Alternative B will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.

- 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. Alternative B will have beneficial impacts on cultural resources, and no impact on floodplains; wetlands; fish; wilderness; threatened, endangered or other special status species; subsistence; local economy; minority and low income populations. Impacts to coastal resources, scenic quality, wilderness, and wildlife will range from negligible to minor adverse effects.
- 2. The degree to which the proposed action affects public health or safety. Employee safety and health will not be affected by the project, and operations in bear country would follow park guidelines.
- 3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rivers, or ecologically critical areas. The project is located at the face of the oldest known coastal archeological site with the purpose of protecting that site. The site resulted in the designation of a National Historic Landmark in the Amalik Bay area.
- 4. The degree to which effects on the quality of the human environment are likely to be highly controversial. The EA analysis and public comments document that none of the project effects are controversial.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. The EA analysis and public comments do not indicate that any effects are highly uncertain or involve unique or unknown risks.
- 6. The degree to which the action may establish a precedent of future actions with significant effects or represents a decision in principle about a future consideration. The proposed action does not establish a precedent for future actions with significant effects or represent a decision about a future consideration.
- 7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. The proposed action will not act in conjunction with other actions to produce cumulatively significant impacts.
- 8. Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. The project will result in the beneficial protection of an exposed NHL archeological site.
- 9. 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. According to the U.S. Fish and Wildlife Service and National Marine Fisheries Service, no known endangered, threatened, special concern or candidate species within or near the project area will be adversely affected by the project.
- 10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. Alternative B does not violate any federal, state, or local environmental protection laws.

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of park resources that fulfill specific purposes identified in the establishing legislation or that are key to the natural or cultural integrity of the park.

The selected alternative complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988 and 11990. There will be no restriction of subsistence activities as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The National Park Service has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in

accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this project.