

FINDING OF NO SIGNIFICANT IMPACT

SISKIWIT DOCK PROJECT ISLE ROYALE NATIONAL PARK

In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, the National Park Service (NPS) prepared an Environmental Assessment (EA) for the Siskiwit Dock Project at Isle Royale National Park. The purpose of the proposed action is to “allow for the reestablishment of the natural current and distribution of sediment along the shoreline” in the area of the Siskiwit dock in a manner that will not conflict with the purpose, significance, and fundamental resources and values of Isle Royale National Park as described in the 2015 Foundation Document and 1998 General Management Plan (GMP). A secondary goal was to support recreational access and operational access in the area. The purpose of the EA was to document the potential environmental impacts associated with the alternatives and determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI).

THE SELECTED ACTION

NPS Management Policy § 4.8.1.1 states that where “structures have altered the nature or rate of natural shoreline processes, the Service will... investigate alternatives for mitigating the effects of such activities or structures and for restoring natural conditions.” (2006). As noted in Isle Royale’s GMP: “The aerial photography record of this [Siskiwit Dock] area, which dates back to 1930, indicates that these docks have interrupted the natural current along the shoreline and caused a considerable buildup of sand and silt. A small artificial peninsula is being formed....” Further analysis, as outlined in the EA, supported this conclusion. Thus, NPS initially proposed completely removing the existing dock and breakwater.

Along with removal of the structures, the EA also analyzed a no action alternative and replacement of Siskiwit dock and breakwater with a new dock in approximately the same location, where the structure allows for more natural movement of sediment along the shore. Public comments suggested an alternative to create a gap along the shoreline, removing approximately 50 feet of dock, breakwater and all accumulated material starting at the historical shoreline. Access to the new dock would be provided by the addition of a “bridge” over the gap (Figure A). This alternative, referred to as the “gap” alternative, is the Selected Action.



Fig. A. Rendering of the Selected Action. (Courtesy of AMI Consulting Engineers, P.A)

NPS investigated the feasibility of this approach through two formal engineering assessments (Hodek, 2015; AMI, 2018). Based on these analyses, NPS identified a dock/breakwater gap design that would restore sediment movement and meet other NPS criteria. This new design has been selected for implementation.

Specifically, the Selected Action would involve:

- Removal of 60 feet of the existing dock creating a gap in the dock that starts 25 feet from the near-shore end of the dock. This would be removed by an excavator. Some of the old dock material would be used for the dock reconstruction and any remaining material hauled off the island by barge for disposal.
- The two remaining portions of the dock (25 feet near-shore and 165 feet lakeward portion of the dock) would be reconstructed. This would involve encapsulating them using sheet pile around the sides and the pouring a new concrete top. This would increase the width of the dock by about 18 to 24 inches from 10.5 feet to 12.5 feet (See figure 2 below).

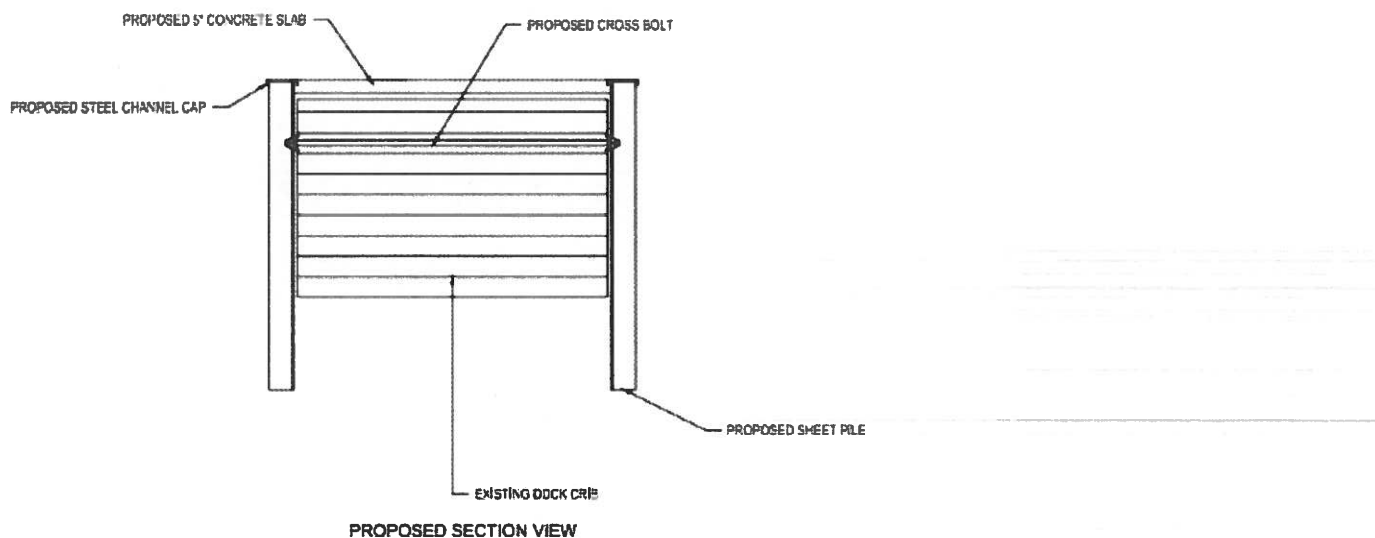


Fig. 2. Section view of proposed dock encapsulation. (Courtesy of MJO Construction)

- A 60-foot pile supported bridge would then be placed across the gap.
- Removal of accumulated accreted material (small stones and sand) that comprise the fillet beach and material between the existing break-wall and dock. This material would be deposited along the shoreline west of the dock to restore that material to its natural deposition area. This work would be accomplished with an excavator and bulldozer.
- Removal of 100-120 feet of the breakwater nearest to shore leaving about 100' of the existing breakwater to protect the lakeward portion of the dock. See Figure A. above.
- Sediment screens would be used to contain sediment from construction activities.
- The project would take 12 weeks and would occur before the middle of September to avoid interference with coaster brook use of the nearby Siskiwit River.

In general, the impacts of this alternative will have impacts similar to the dock reconstruction alternative as presented in the EA. There would not be any impacts not previously analyzed in the EA. The impacts of the selected "gap" alternative are described below using the impact topics selected for analysis in the EA.

Topography-Geology-Soil: The selected action will involve the manual movement of the small gravel that has accumulated in the area to the shoreline west of the dock, using an excavator and bulldozer. Under the previously proposed alternative, this material would have been left in place to be distributed naturally by wave and ice action. The selected alternative will manually move that material to the area the Park would have expected this material to move naturally, so that the new dock can be constructed. The material will initially cover an area of approximately 50,000 square feet. Manual movement cannot exactly mimic natural movements of this material either in speed or distribution, though subsequent natural processes will likely further redistribute the material as described in the removal alternative. Consequently, the selected alternative will restore approximately 50,000 square feet of lakebed (the area from which the accumulated materials are to be removed). Still, under the selected alternative approximately 10,000 square feet of lakebed would remain covered with the encapsulated dock and the existing breakwall.

Water Quality: Similar to the proposed alternative in the EA, the selected alternative will have minimal impacts on water quality. Construction activities will cause short term turbidity, though the impact will be minimized through the use of sediment screens.

Aquatic Organisms: During construction activities, individual fish may avoid the area and some benthic organisms will be displaced. The new dock and breakwall structure will maintain some of the fish habitat now present. The selected alternative will provide a similar amount of habitat as the replacement dock alternative in the EA.

Visitor Use and Experience: There will be a short-term impact visitor experience during construction activities due to noise and presence of equipment and workers. The park will try to minimize the impact by conducting work during the shoulder seasons. Long-term visitor experience would be beneficial, as it

maintains access to the area. Additionally, retaining the breakwater provides shelter at the dock during rough weather.

Other Alternatives Considered

Alternatives considered in the EA included:

No Action Alternative: Under this option, no changes would be made to the current dock or breakwater.

Alternative A: Removal of Siskiwit Dock (this was identified as the Preferred Alternative when the EA was published): The Siskiwit dock and breakwater would be completely removed, thereby reestablishing natural shoreline processes.

Alternative B: Replacement of Siskiwit Dock: The dock and breakwater would be replaced with a new dock in approximately the same location and with a structure allowing for more natural movement of sediment along the shore.

Alternatives proposed in public comments:

“Gap” Alternative: Create a gap along the shoreline, thus removing an approximately 50 feet of dock, breakwater and accumulated material starting at the historical shoreline. Access to the remaining dock section would be provided by the addition of a bridge over the gap. This is now the selected alternative.

Alternatives considered but dismissed in the EA:

Manual bypass: This option would involve periodically dredging the accumulated material east of the dock and breakwater and placing the material along the shoreline at the southwest end of Siskiwit Bay. Although the rationale behind this action would be to compensate for decades of sediment transport interruption by the dock, such an action does not mimic the natural process of shoreline sediment transport.

Relocation of Dock to Senter Point: This option would remove the Siskiwit dock and build a new dock at Senter Point. This alternative is not desirable due to concerns about cultural heritage sites in this location and appears to present a similar potential for disruption of natural sediment transport within Siskiwit Bay.

Relocation to Island Mine Wharf: Under this option a replacement dock would be built at Island Mine Wharf, likely near the site of the previous 1880’s-era dock. While addressing the issue of natural shoreline processes at the Siskiwit dock, a new dock at Island Mine Wharf would require a massive structure given the exposed nature of this site to the full length of Siskiwit bay. Further, there would be no access to Park trail system without installing new trail in designated wilderness.

Removable Dock: Under this option, the Park would remove Siskiwit dock and replace it with either a floating or moveable dock. This option does not appear technically feasible as current dock designs could not withstand the severe storms that can occur in Lake Superior. Additionally, storage and deployment would be impracticable.

Rationale for Selected Alternative

The “gap” alternative was selected because it best meets NPS’ dual goals of restoring sediment transport along this shoreline and allowing for continued recreational and operational access at the site. This alternative addresses NPS Management Policies to mitigate altered natural shoreline processes and restore natural conditions. Retaining dock access is a public benefit and facilitates emergency response and natural resources and maintenance operations. While eliminating the dock entirely would better facilitate natural processes, it would not meet the secondary goal of access and operational use.

Significance Review

As defined in 40 CFR 1508.27, 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:

Under the selected alternative, adverse impacts are short-term and minimal, resulting from construction activities. Beneficial long-term impacts will result from the restoration of natural sediment movement. The Park considers none of the impacts significant due to the short-term, temporary effects of construction and given that the restored sediment transport, while positive, covers only a small area with relatively minor levels of sediment movement.

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

The selected alternative will not adversely affect public health and safety. Maintaining a dock with the breakwall will provide shelter from storms to boaters and allow easier access to the area for first responders.

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 will be no impacts to wetlands, wild and scenic rivers, ecologically critical areas, farmland, or historic or cultural resources.

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

No impacts are likely to be highly controversial.

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks:

While this is a new design for the park, the general principles of dock construction are widely practiced and impacts are known from previous projects. The effects of the selected action are not highly uncertain, nor are they anticipated to involve unique or unknown risks.

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 selected alternative is not expected to set a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration. All dock decisions at the park are made on a case-by-case basis.

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

Cumulative impacts were determined for the alternatives considered in the EA by combining the impacts of each alternative with other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. The Park determined that there will be no significant cumulative impacts associated with the any of the alternatives considered in the EA. Given that the impacts of the selected alternative and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions are very similar to the alternatives considered in the EA, the park determined that no significant cumulative impacts will occur.

The 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 current dock is not a historic structure. There are no previously recorded cultural resources or historic structures listed in, or determined eligible for listing in, the National Register of Historic Places that will be directly or indirectly affected by the selected alternative. The NPS consulted with the Michigan State Historic Preservation Officer regarding the effects to cultural and historic resources and no concerns were raised.

The degree to which the action may adversely affect an endangered or threatened species or its critical habitat:

The U.S. Fish and Wildlife Service Section 7 Consultation Technical Assistance website was accessed on August 18, 2015. The subsequent review identified no aquatic endangered or threatened species or critical habitat. Four species are listed for Keweenaw County: Canada lynx (*Lynx canadensis*), Gray wolf (*Canis lupus*), Northern long-eared bat (*Myotis septentrionalis*), and Rufa Red knot (*Calidris canutus rufa*). These species do not rely on habitat in the project area, therefore there would be no effect on these species.

There are many state-listed species found on Isle Royale and their presence near the dock cannot be definitively ruled out without specific surveys. Detailed surveys would be conducted prior to any construction-related activities, if the proposed activities were expected to disturb adjacent habitats.

A population of coaster brook trout (*Salvelinus fontinalis*) has been documented in Siskiwit Bay. This is a species of conservation interest, but it is not officially designated as a federally or state listed species. Construction activities will be timed to avoid the spawning season as coasters could be in the bay at the time on the way to the Big Siskiwit River.

Whether the action threatens a violation of federal, state, or local laws; including environmental protection laws:

The selected alternative violates no federal, state, or local laws, including environmental protection laws. Necessary construction permits will be attained.

Citations

AMI Consulting Engineers, P.A. 2018. Isle Royale Siskiwit Dock Design Report.

Ralph J. Hodek, P.E.. 2016. Siskiwit Dock Report.

PUBLIC INVOLVEMENT

The EA was made available for public review and comment from April 20, 2016 through May 22, 2016 on the NPS Planning, Environment and Public Comment (PEPC) website. Announcement of the review opportunity was made through news releases, social media, park website and email.

Correspondence was received from 19 individuals or organizations, and was documented on the NPS PEPC website.

CONCLUSION

Based on a review of the facts and analysis contained in this EA and supporting documentation, the selected alternative will not have a significant impact, either by itself or in consideration of cumulative impacts. Accordingly, the requirements of the NEPA, regulations promulgated by the CEQ, the US Department of the Interior, and provisions for NPS Director's Order 12 and Handbook have been fulfilled, NPS finds that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the NEPA of 1969 and regulations of the CEO (40 CFR 1508.9), an EIS will not be prepared for this project.

Recommended:

Phyllis A. Green
Superintendent, Isle Royale National Park

8/7/19
Date

Approved:

Patricia S. Tray
Acting Regional Director, Midwest Region

8.26.19
Date

SISKIWIT DOCK PROJECT AT ISLE ROYALE NATIONAL PARK

APPENDIX 1: NON-IMPAIRMENT DETERMINATION

The NPS 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 1916 General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS 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 NPS managers discretion to allow adverse 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 NPS the management discretion to allow certain impacts within parks, that discretion is limited by statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specially provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources and values. An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

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

An impact would be less likely to constitute 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.

Park resources and values that are subject to the non-impairment standard include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; Cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment findings are not necessary for transportation and roads because impairment findings relate back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. The threshold for considering whether there could be impairment is based on whether an action will have significant effects.

The following are the only resources for which the park anticipates measurable impacts:

Topography-Geology-Soil: The selected action will involve the manual movement of the small gravel that has accumulated in the area to the shoreline west of the dock, using an excavator and bulldozer. The material will initially cover an area of approximately 50,000 square feet. Manual movement cannot exactly mimic natural movements of this material either in speed or distribution, though subsequent natural processes will likely further redistribute the material as described in the removal alternative. Consequently, the selected alternative will restore approximately 50,000 square feet of lakebed (the area from which the accumulated materials are to be removed). Still, under the selected alternative approximately 10,000 square feet of lakebed would remain covered with the encapsulated dock and the existing breakwall.

The manual movement and distribution of small gravel does not impair the integrity of these soils or the geology of the lakebed. Conversely, the activity will, to the extent practicable, mimic natural processes. Therefore, there is no potential for impairment to soils, geology or topography under the selected alternative.

Water Quality: The selected alternative will have minimal impacts on water quality. Construction activities will cause short term turbidity, though the impact will be minimized through the use of sediment screens. Because these impacts will only last the duration of the construction and the impacts will be localized to the project area, they will not change the integrity of the lake's water quality. There will be no long-term measurable impacts to water quality at the site. Therefore, there is no potential for impairment of water quality from the selected alternative.

Aquatic Organisms: During construction activities, individual fish may avoid the area; some benthic organisms will be displaced and there is a potential for individual mortalities; these would not be significant on a population level. After construction ends it is expected that the areas will be repopulated. The new dock and breakwall structure will maintain some of the fish habitat now present. The selected alternative will provide a similar amount of habitat as the replacement dock alternative in the EA. No long term population level impacts are expected, therefore there is no potential for impairment to aquatic organisms.

The selected action will not have significant impacts on the park's resources, visitor opportunities or any additional attributes. The selected action allows for ongoing visitor use and allows for the reestablishment of the natural current and distribution of sediment along the shoreline. The NPS has determined that the selected action will not cause impairment.

The proposed action is a shoreline stabilization project that will be implemented in the future. The project will involve the construction of a shoreline stabilization structure that will be designed to protect the shoreline from erosion and to provide a stable area for visitor use. The project will be designed to be compatible with the natural resources of the park and to provide a stable area for visitor use.

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RESPONSE TO COMMENTS

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The NPS received one comment suggesting the dock was a cultural resource. This issue was addressed in the EA in more detail, but generally the dock is of common design not unique or significant to Isle Royale and is reaching the end of its use life.

The Errata, when combined with the EA, FONSI, and Non-impairment determination, constitute the final documents for the Siskiwit Dock project at Isle Royale National Park.