



National Park Service
U.S. Department of the Interior

Pictured Rocks National Lakeshore
Michigan

FINDING OF NO SIGNIFICANT IMPACT

Personal Watercraft Use Revised Environmental Assessment

Recommended:

David Horne
Superintendent, Pictured Rocks National Lakeshore

Date

Approved:

Patricia S. Trap
Acting Regional Director, Midwest Region, National Park Service

Date

INTRODUCTION

The National Park Service (NPS) has prepared this Finding of No Significant Impact (FONSI) for the Personal Watercraft Use Revised Environmental Assessment (Revised EA) for Pictured Rocks National Lakeshore (national lakeshore/park). The statements and conclusion reached in this FONSI are based on documentation and analysis provided in the Revised EA and associated decision file.

An EA was published for public comment in October 2017. After reviewing and evaluating the public comments received on the EA, the NPS decided to evaluate an additional alternative and prepare a Revised EA for personal watercraft (PWC) use at the national lakeshore. The explanation for including an additional alternative is described in chapter 1 of the Revised EA. A summary of the public comments and the NPS response to substantive public comments can be found in appendix F of the Revised EA. The Revised EA contains additional information on the project background, the need for action, the current state of the resources analyzed, and the impacts of each of the alternatives on those resources. To the extent necessary, relevant sections of the Revised EA are incorporated by reference into this FONSI and summarized below.

The Revised EA analyzes four alternatives, including a no-action alternative. Alternative 1 (PWC Use from Sand Point to Miners Beach) would allow for continued PWC use in the area currently open to use, but would impose an additional requirement to phase-out carbureted two-stroke PWCs in two years. Alternative 2 (Entire Shoreline Open to PWC Use) would open the entire shoreline to PWC use, and also would require carbureted two-stroke PWCs to be phased-out in two years. Alternative 3, the no-action alternative, would eliminate PWC use in the park. Alternative 4 is the same as Alternative 1, but would not impose a phase-out of carbureted two-stroke PWCs.

SELECTED ALTERNATIVE

The NPS has selected Alternative 4 (hereinafter referred to as the “selected alternative”) for implementation. Under the selected alternative, the NPS will continue to implement the 2005 Special Regulation for PWC Use at Pictured Rocks National Lakeshore (36 CFR § 7.32 (d)) and will not need to develop a new special regulation. The following elements specific to PWC use would be implemented under the selected alternative (Attachment A explains the selected alternative in more detail):

- PWCs will be permitted on Lake Superior between the western boundary of the national lakeshore near Sand Point to the east end of Miners Beach.
- PWCs will be allowed to land on the sandy beaches at Sand Point or Miners Beach, as these are the only safe places to beach along the national lakeshore within the proposed PWC use areas.
- PWCs at the national lakeshore will be managed to be consistent with Michigan state laws, NPS general regulations, and the Superintendent’s Compendium.

The NPS also will implement an increased education and outreach program to better inform visitors about PWC use at Pictured Rocks National Lakeshore. The NPS will increase the amount of PWC information available to the public, and will educate those who use PWCs on safety protocols. The park’s website, publications, and brochures will be updated to clearly convey PWC use regulations at the national lakeshore. The NPS will also work with PWC recreational groups to increase education of PWC users on regulations and safety. While on the water, NPS law enforcement staff will be responsible for engaging PWC users to educate them on regulations and safety protocols. If necessary, safety signs regarding PWCs would be installed at the Sand Point launch site and at the launch site in Munising.

Lastly, the NPS will conduct a PWC count to determine the level of PWC use in the future. In five years (or sooner if necessary), the park will undertake a PWC count similar to the one that was conducted during the development of the 2017 Pictured Rocks EA. If the results of the PWC count indicate that PWC use at the park has substantially increased from current levels, the NPS will determine if additional compliance actions are necessary, and if so, complete that additional compliance.

RATIONALE FOR DECISION

The NPS believes that PWC use at the level anticipated under the selected alternative is appropriate and will not lead to unacceptable impacts, as demonstrated by the impact analysis in the Revised EA and the discussion in the attached Non-impairment Determination (NID). The selected alternative will allow PWC use under current regulations to continue, with all PWC engine types permitted, between the western boundary of the national lakeshore near Sand Point and the eastern edge of Miners Beach. The selected alternative will have a much lower potential to cause adverse impacts relative to Alternative 2, which would open the entire shoreline to PWC use, thus increasing the potential for impacts to wildlife, visitor experience, and wilderness. Furthermore, the selected alternative will not place a financial burden on owners of older PWCs, who would need to replace their older PWCs within two years under Alternatives 1 and 2. Analysis shows that air quality in the park is generally good, and the requirement to phase-out older engines would not result in a measurable improvement to air quality due to the low level of PWC use at the lakeshore. The NPS anticipates that carbureted two-stroke PWCs will eventually be replaced as PWC owners purchase newer PWC models with direct injection engines; this assumption is supported by the trends in the age of the PWC fleet demonstrated by the PWC registration data in the Revised EA. Continuing to align PWC use with applicable elements of Michigan state laws, NPS general regulations, and the Superintendent's Compendium under the selected alternative will minimize the impacts from PWC use on the national lakeshore's resources. Because the NPS believes that some level of PWC use is appropriate, Alternative 3 was not selected.

MITIGATION MEASURES

Mitigation measures will minimize the impacts from PWC use on the national lakeshore's resources. These mitigation measures will be implemented as part of the selected alternative. Mitigation measures include a speed restriction close to the shoreline and improved outreach and education measures. The benefits of the mitigation measures are described below.

- **Flat-Wake Zones** – Limiting PWCs to a flat-wake speed within 200 feet of the shoreline or when near swimmers or other vessels reduces safety concerns associated with PWC use. Traveling at a slow speed and perpendicular to the shoreline will limit impacts on wildlife that use the shoreline for resting, feeding, and nesting. Traveling at a flat-wake speed reduces noise impacts of PWC use on other visitors and wildlife.
- **Hours of Operation** – Restricting PWC use to hours between 8:00 a.m. and sunset eliminates noise intrusion into the nighttime soundscape of the park. Limiting PWC use to daytime hours will also reduce safety concerns for PWC users, as the environmental conditions at the national lakeshore can change quickly, creating dangerous conditions for PWC users.
- **PWC Equipment, Operation, and Behavior** – Many Michigan state requirements, such as requiring that each PWC rider wear a personal flotation device and requiring all operators to be a certain age, will increase the safety of PWC users, as well as other park visitors. Michigan state law and NPS regulations prohibit certain behaviors such as jumping in the wake of another vessel within 100 feet of another vessel, weaving a PWC through congested boat traffic, and operating a PWC within 500 feet of a shoreline designated as a swimming beach. Prohibiting these behaviors

reduces conflicts and potential safety issues with swimmers and other vessels at the national lakeshore.

- **Ethnographic Resources Protection** – By restricting PWC use near areas used for permitted ethnographic purposes and enforcing the restriction by boat patrol, the NPS will minimize impacts on ethnographic resources.
- **Improved Education and Outreach Program** – Increasing the amount of PWC information available to the public and educating those who use PWCs about safety protocols will reduce conflicts between PWC users and other visitors and ultimately improve visitor safety and experiences.

SIGNIFICANCE CRITERIA REVIEW

As documented in the Revised EA, the selected alternative has the potential to cause adverse impacts on water resources, air quality, soundscapes and the acoustic environment, wildlife and wildlife habitat, special-status species, ethnographic resources, visitor use and experience, and visitor safety as a result of PWC use at the national lakeshore. However, no potential for significant adverse impacts was identified. As defined by CEQ Regulation 40 CFR 1508.27, significance is determined by examining context and intensity, with consideration of the following ten criteria. Overall, the impacts of the selected alternative are expected to remain the same or similar as current conditions.

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.

There is the potential for both beneficial and adverse impacts from implementation of the selected alternative, but the analysis in the Revised EA demonstrates there would be no significant impacts. For all resource categories, the impacts of the selected alternative will be similar to current conditions, and are not expected to cause more than minimal impacts. The selected alternative allows PWC use along approximately 8 of the park's 42 miles of shoreline, which is the area in which PWCs are currently allowed to operate. Therefore, the majority of the park will continue to be devoid of impacts from PWC use under the selected alternative.

Impacts of PWC use to water quality will be localized in the Sand Point segment, where PWC use is currently allowed and would continue to be allowed under the selected alternative. As discussed in the Revised EA, due to the low level of PWC use at the park, the relatively short PWC use season, and the large volume of water in the system, impacts on water quality would be minimal. In the future, as older PWCs are retired and replaced with newer PWCs, water quality impacts from PWC use would decline.

Annual emissions of air pollutants from PWCs would continue at current levels, resulting in continued slight adverse impacts to air quality. Due to the low levels of PWC use at the national lakeshore, the release of air pollutants from PWC use will not create a distinguishable effect on air quality. This conclusion is supported by the air quality analysis in the Revised EA. The pollutant emissions modeling in the Revised EA assumed that all PWCs were the more polluting two-stroke variety, even though it is very likely that newer four-stroke PWCs are in use at the national lakeshore. Even with this assumption, the analysis in the Revised EA determined that pollutants released from PWC use would not create a perceptible adverse impact on air quality.

The low level of PWC use combined with the infrequency of use (summer months, weekends, daylight hours) and the limited PWC use area will result in minimal impacts to soundscapes at the national

lakeshore. There would be no new noise impacts from PWC use under the selected alternative because the area available to PWC use would remain the same as the current use area.

PWCs operating in transit mode could impact wildlife, but these impacts will be very similar to impacts from other motorized watercraft. The greatest impact of PWC use on wildlife is the disruptive noise generated during play behavior, which could cause flushing and greatly reduce the listening area for wildlife while PWCs are in use. But again, due to the low levels of PWC use, the short period of peak PWC use (daytime hours during the summer months), the limited area open to PWCs, and the 200-foot flat wake zone along all shorelines, the impacts to wildlife would be minimal.

The NPS determined under Section 7 of the Endangered Species Act (ESA) that the implementation of the selected alternative may affect, but is not likely to adversely affect the federally-listed piping plover. In a letter dated September 24, 2018, the USFWS concurred with the NPS's determination that the preferred alternative (Alternative 4) would not likely adversely affect piping plover and that any potential impacts of this project would be discountable. The state-listed species (common loon, bald eagle, osprey, peregrine falcon, and merlin) will experience only slight adverse impacts from PWC use, as described in the Revised EA.

PWC use would continue to have adverse impacts on ethnographic resources between the western boundary of the park near Sand Point to Miners Beach due to disturbance from their presence and noise. Overall, adverse impacts from PWC use are anticipated to be minimal because PWC use is low at the national lakeshore, expected to remain at current levels, and would be limited to the portion of the park shoreline west of Miners Beach.

The presence of PWCs within the national lakeshore will continue to adversely affect visitor experience of the other watercraft users and shoreline users as result of the noise associated with PWCs and from PWCs operating in a circling or play behavior. However, these impacts will be limited to the 8-mile section of lakeshore that would remain open to PWC use. Visitors recreating inland from the shoreline would experience fewer impacts from PWC use. Visitors would also not experience any adverse impacts of PWCs at night because PWCs would not be allowed to operate after sunset. Also, visitors recreating outside of the summer months should experience little to no impact from PWC use. The selected alternative will benefit PWC users overall, as they will be able to continue to use both carbureted two-stroke and direct engine PWCs at the national lakeshore for the foreseeable future.

PWC use in the current PWC use area has the potential for adverse impacts on visitor safety, especially with other boaters, swimmers, and kayakers. However, the potential for impacts to visitor safety is minimal due to the limited PWC use area (approximately 8 miles of the park's 42-mile shoreline) and the low usage of PWCs (both in numbers observed and days of usage) at the national lakeshore. The 200-foot flat wake zone also reduces the potential for safety issues along the shoreline.

PWC use under the selected alternative will not have impacts on wilderness.

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

Visitor safety was examined for two user groups: PWC users and other shoreline users, including swimmers and those using other watercraft. Safety concerns for PWC operators include the potential for collisions with other PWCs or other watercraft (motorized or not), loss of control of the PWC, and rapidly changing weather and water conditions on Lake Superior. PWC operators are expected to comply with the safety requirements of the selected alternative (e.g., speed limits, equipment requirements, behavior guidelines, etc.); therefore the greatest potential for impact will be the rapidly changing weather conditions on Lake Superior. Although the area near Sand Point is somewhat buffered by the presence of

Grand Island against the increased wind and wave action that can make PWC operation unsafe, PWC users must continue to be aware of the dangers of operating watercraft on Lake Superior.

Under the selected alternative, the NPS would implement an increased education and outreach program to inform visitors about PWC use the national lakeshore. The NPS would increase the amount of PWC information available to the public, and would educate those who use PWCs on safety protocols. The website, publications, and brochures would be updated to clearly convey PWC use regulations at the national lakeshore. The NPS would also work with PWC recreational groups to increase education of PWC users on regulations and safety. While on the water, NPS law enforcement staff would be responsible for engaging PWC users to educate them on PWC regulations and safety protocols. If necessary, safety signs regarding PWCs would be installed at the Sand Point launch site and at the launch site in Munising.

Compliance with the safety requirements will also minimize potential impacts on other shoreline and watercraft users. Potential safety impacts include collisions with swimmers or other boaters and capsizing kayaks. The selected alternative will continue to allow PWC use between the western boundary of the national lakeshore near Sand Point to the east end of Miners Beach. Although Sand Point is a popular swimming area and contains a small boat ramp that can accommodate kayaks, canoes, and PWCs, there are no documented cases of accidents occurring between PWC users and swimmers or other watercraft users. The education and outreach program will provide information that may change the behavior of some PWC users who might otherwise act in a manner that will create unsafe situations, thus reducing the potential for impacts. The potential for impacts to visitor safety for PWC users, swimmers, and other watercraft users is minimal due to the low usage of PWCs (both in numbers observed and days of usage) at the national lakeshore and the limited area in which PWCs can operate (approximately 8 miles of the park's 42-mile shoreline). The 200-foot flat wake zone and other state and federal regulations governing PWC operating behavior also reduces the potential for safety issues along the shoreline.

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.

No historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas will be significantly affected by the selected alternative. With respect to ethnographic resources, the Chippewa historically fished, hunted, and harvested maple sugar from areas within the national lakeshore. Ethnographic resources within the national lakeshore also include sacred sites such as dunes, mouths of rivers, and creeks. The PWC use area under the selected alternative contains significant Chippewa resources including Munising Falls, Sand Point Marsh, Miners Beach, and Miners Castle, which are used for ceremonies, spiritual cleansing, and food gathering. PWC use will continue to have adverse impacts on ethnographic resources at the national lakeshore due to disturbance from the presence of noise of the vessels. To minimize potential impacts, the NPS will conduct boat patrols while ethnographic resources are being used (e.g., ceremonies, etc.) to monitor and restrict PWC use as necessary. PWC users could also directly impact natural resources used for ethnographic reasons by beaching their vessels and disembarking to recreate on the shoreline and upland areas, which could damage plants and disturb wildlife that are considered important to the Chippewa. Although PWC use will have an adverse impact on ethnographic resources, impacts will be minimal due to the low level of PWC use and the limited area where PWC use is allowed. Other mitigation strategies such as an improved education and outreach program, limiting PWC operation to daylight hours, and the flat-wake zone should ensure that impacts to ethnographic resources are minimized.

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

There are no highly controversial impacts to the human environment. Impacts to the quality of the human environment are well-studied and well-understood.

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

Potential impacts from implementation of the selected alternative are not highly uncertain and do not involve unique or unknown risks. Impacts have been well-studied and are well-understood.

6. 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 was chosen based upon an analysis of potential impacts to park resources, and does not establish a precedent for future actions with significant effects.

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

The NPS considered the selected alternative's contribution to cumulative effects when combined with other ongoing and future actions that could affect the resources of the national lakeshore. Based on the analysis in the Revised EA, the selected alternative will not significantly impact the park's resources. Further, the selected alternative does not add to the impacts of other activities to the level that will produce significant effects.

8. The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.

The majority of historic structures within the park are either located outside the study area or in areas already experiencing heavy visitor use from both land and water vehicles. Because the archeological resources of the national lakeshore (excluding shipwrecks) are not within the waters of Lake Superior, the use of PWCs would not adversely impact these resources. Current management permits the operation of PWCs and other motorized vessels in the national lakeshore, which allows visitors to access shipwreck areas by water. Potential impacts to these submerged cultural resources from PWC users are expected to be minimal and similar (but much less frequent) to those caused by visitors using motorboats. Any potential impacts from PWCs on cultural landscapes would be similar to those from motorboats, although impacts from PWCs are expected to be much less frequent due to the low level of PWC use in the park and the limited area in which PWCs would be allowed to operate. Therefore, implementation of the selected alternative to continue to allow PWCs within the existing PWC use area does not have the potential to significantly affect scientific, cultural, or historic resources.

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.

Federal-Listed species. The only federally listed species with the potential to be impacted by the selected alternative is the piping plover (*Charadrius melodus*). Piping plovers forage on various beaches throughout the national lakeshore, including Sand Point, Twelvemile Beach, and the eastern shoreline of the park. Nesting piping plovers have not been observed in the national lakeshore in over a decade. However, breeding habitat is present in the park and the population is growing, so the breeding range could expand in the future. Designated piping plover critical habitat exists on a small portion of land at

the easternmost edge of the park, far from the PWC use area.

Under the selected alternative, the potential adverse impacts to piping plovers will remain the same as current conditions. Impacts of PWC use on piping plovers in areas such as Sand Point or Miners beach would generally only occur at times when these popular beaches aren't occupied by visitors, PWCs are in use, and piping plovers are present. Given the low level of PWC use in the park, the short period of peak PWC use (daytime hours during summer months), the 200-foot flat wake zone, and the marginal plover habitat adjacent to the PWC use area, the potential exists for adverse impacts on individual piping plovers, but the impacts will be infrequent and minimal, and will not be significant.

For the purposes of Section 7 of the ESA, the NPS has determined the selected alternative may affect, but is not likely to adversely affect the piping plover. In a letter dated September 24, 2018, the USFWS concurred with the NPS's determination that the preferred alternative (Alternative 4) would not likely adversely affect piping plover and that any potential impacts of this project would be discountable.

State-Listed Species: The state-listed species – common loon, bald eagle, osprey, peregrine falcon, and merlin – will experience adverse impacts from PWC use. Impacts could include alarming, flushing, disturbing nesting behaviors, disrupting or changing habitat, or causing physical harm. Special-status species that inhabit the areas adjacent to the shoreline could be affected by the small number of PWC users who beach their vessels on the shoreline and recreate in these areas. PWCs operated in transit mode will impact special-status species, but these impacts will be very similar to impacts from other motorized watercraft. The greatest impact of PWC use is the disruptive noise generated during play behavior, which could cause flushing and will greatly reduce listening area for the species while the PWCs are in use. PWC play behavior could reach noise levels that have been found to disrupt natural behaviors in birds. However, because the PWC use area is limited to 8 miles of the national lakeshore's 42-mile shoreline, PWC use will continue to be low under the selected alternative, and the PWC use season is short (daytime during summer months), the impacts will not result in measurable effects on state-listed special-status species.

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

Applicable Federal, State, and local laws and requirements were considered in the development of the development and analysis of actions for PWC use under the selected alternative. The selected alternative will not violate any Federal, State, or local environmental protection laws.

FINDING OF NO SIGNIFICANT IMPACT

As described above, the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with Section 102(2)(c) of NEPA and the CEQ regulations at 40 CFR 1508 et. seq., an environmental impact statement is not required and will not be prepared for implementation of the selected alternative.

-
- Attachment A: Elements of the Selected Alternative
 - Attachment B: Non-Impairment Determination

ATTACHMENT A: ELEMENTS OF THE SELECTED ALTERNATIVE

Access Restrictions: The superintendent has the ability to limit, restrict, or terminate access to areas designated for PWC use for considerations of cultural resource protection, health and safety of park visitors, natural resource protection, and other management activities or objectives (36 CFR § 7.32 d.4).

Speed Limit: PWCs will be permitted to operate at up to 55 miles per hour (mph) unless in close proximity to shoreline, swimmers, or other vessels, in which a flat-wake speed is required. Within 200 feet of the shoreline, PWC users will be required to operate at a flat-wake speed and travel perpendicular to the shoreline (MCL 324 § 80209 (1)). The flat-wake speed restrictions will also be required in areas where the water is less than 2 feet deep, including areas surrounding offshore islands and sandbars. PWCs will also be required to maintain a flat-wake speed when within 150 feet of another vessel (except for PWCs traveling together), and within 100 feet of a moored or anchored vessel, shoreline, dock or raft, or any marked swimming area or person in the water (MCL 324 § 80209(2)). These speed limits are consistent with Michigan state law, which also applies in state waters adjacent to the national lakeshore.

Hours of Operation: The NPS general regulation for PWC operation (36 CFR § 3.9(b)(3)) states that no person may operate a PWC anytime between sunset and sunrise. If a park is located within a state with more restrictive regulations for the operation of PWC, then applicable state laws apply. In this case, the Michigan state law, which prohibits PWC use between sunset and 8:00 a.m. (MCL 324 § 80205(5)), is more restrictive than NPS regulations. Implementing the Michigan state law will reduce confusion to riders coming into the national lakeshore from outside areas. Therefore, the Michigan state law, which prohibits PWC use from sunset to 8:00 a.m., will be implemented under the selected alternative at the national lakeshore.

PWC Equipment and Safety: PWC users will be required to follow Michigan state law and NPS general regulations pertaining to PWC safety, which state the following:

- PFDs must be worn by PWC users. Each person riding on or being towed behind a PWC must wear a US Coast Guard (USCG)-approved type I, II, III, or V PFD (MCL 324 § 80205(1) and 36 CFR § 3.9(b)(1)).
- The lanyard of a PWC ignition safety switch must be attached to the person, clothing, or PFD of the operator (MCL 324 § 80205(3-4) and (36 CFR § 3.9(b)(2))).
- A boating safety certificate is required for some individuals based on the PWC age requirements discussed below, and the PWC operator must have this certificate on his or her person while operating a PWC (MCL 324 § 80210; MCL 324 § 80212(1-3); MCL 324 § 80215). Michigan offers two online boating safety classes and an exam, as well as an 8-hour class from the USCG Auxiliary Division 18.

Minimum Age Requirements: The NPS will continue to follow Michigan state law regarding age requirements for PWC operators and passengers (MCL 324 § 80215), as follows:

- PWC operators over 16 years of age and born after December 31, 1978 may operate a PWC legally if they have obtained a boating safety certificate. Individuals born before December 31, 1978, may operate a PWC legally without restrictions.
- PWC operators may not be less than 14 years of age; PWC operators of 14 and 15 years of age may operate a PWC if they have obtained a boating safety certificate and

- Are accompanied on the vessel by a parent, legal guardian, or an individual of at least 21 years of age who has been designated by a parent or legal guardian.
- Are operating a PWC at a distance of no more than 100 feet from a parent or legal guardian, or an individual of at least 21 years of age who has been designated by a parent or legal guardian.
- Individuals of less than seven years of age may not ride on or be towed behind a PWC unless with a parent, legal guardian, or a designee of the parent or legal guardian.

PWC Operation and Behavior: PWC operators will be required to operate PWCs in a reasonable and prudent manner at all times, and will be required to follow both Michigan state law and NPS general regulations (36 CFR § 3.8 and 3.9). The following behaviors are considered unsafe and are prohibited:

- Jumping in the wake of another vessel unnecessarily close to the other vessel (MCL 324 § 80205(9)(b)). No PWC may jump the wake, or become partially airborne or completely leave the water while crossing the wake of another vessel within 100 feet of the vessel creating the wake (36 CFR § 3.9(b)(4)).
- Weaving a PWC through congested traffic (MCL 324 § 80205(9)(a)).
- Swerving at the last possible moment to avoid collision (MCL 324 § 80205(9)(c)).
- Crossing within 150 feet behind another vessel other than another PWC (MCL 324 § 80205(6)).
- Operating in waters less than 2 feet deep unless operating at a flat-wake speed or while docking or launching the PWC (MCL 324 § 80205(7)(a)(b)).
- Operating a vessel within 100 feet of a diver's flag (36 CFR § 3.8(b)(1)).
- Failing to observe restrictions established by a regulatory marker (36 CFR § 3.8(b)(2)).
- Operating a vessel in excess of a flat-wake speed within 100 feet of a downed water skier (36 CFR § 3.8(b)(4)(i)), person swimming, wading or fishing from shore or floating with the aid of a flotation device (36 CFR § 3.8(b)(4)(ii)), a designated launch site (36 CFR § 3.8(b)(4)(iii)), or anchored or drifting vessel (36 CFR § 3.8(b)(4)(iv)).
- Operating a vessel within 500 feet of a shoreline designated as a swimming beach, unless otherwise designated (36 CFR § 3.8(b)(5)).
- Reckless or negligent operation of a vessel (36 CFR § 3.8(b)(6-9)).

Ethnographic Resources Protection: The national lakeshore contains sacred sites that have religious or cultural significance to the Ojibway (also commonly spelled Ojibwe or Ojibwa), a woodland Indian tribe who lived on the margins of Lake Superior. The Ojibway still use the lands and waters of the national lakeshore for traditional practices. PWC use will be restricted at specific locations during the permitted use of ethnographic resources. Boat patrols will be conducted in the vicinity of the ethnographic resource use to reduce the potential for PWC-related intrusion into the ceremonial activity.

PWC Launch and Landing Sites: According to NPS general regulations (36 CFR § 3.8), launching or recovering a vessel is prohibited except at a launch site designated by the superintendent. Currently, PWCs are only allowed to launch from a designated site at Sand Point, and may only beach craft at Sand Point Beach and Miners Beach (36 CFR § 7.32(d)). Under the selected alternative, Sand Point will remain as the only PWC launch point on Lake Superior within the national lakeshore. Visitors could continue to launch at existing sites outside of the national lakeshore boundary and could ride PWCs into the national lakeshore.

ATTACHMENT B: NON-IMPAIRMENT DETERMINATION

INTRODUCTION

This non-impairment determination has been prepared for the selected alternative, as described in the Finding of No Significant Impact for the Personal Watercraft (PWC) Use Revised Environmental Assessment (Revised EA) at Pictured Rocks National Lakeshore.

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of the Interior and the NPS to manage units "to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 USC 100101).

NPS *Management Policies 2006* (NPS 2006), Section 1.4.4, explains the prohibition on impairment of park resources and values:

“While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.”

An action constitutes impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values” (NPS 2006, Section 1.4.5). To determine impairment, the NPS must evaluate the “particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts: (NPS 2006, Section 1.4.5).

National park system units vary based on their enabling legislation, natural and cultural resources present, and mission. Likewise, the activities appropriate for each unit and for areas in each unit also vary. For example, an action appropriate in one unit could impair resources in another unit.

As stated in the NPS *Management Policies 2006* (sec. 1.4.5), an impact on any park resource or value may constitute an impairment, but an impact would be more likely to constitute an 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
- 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.

The mission of Pictured Rocks National Lakeshore is to conserve the ecosystem integrity of the national lakeshore, a mosaic of geologic, biologic, scenic, and historic features, offering opportunities for

recreation, education, inspiration, and enjoyment forever. The national lakeshore's significance statements express the uniqueness of the resources, including a mosaic of features such as cliffs, dunes, and waterfalls; extraordinary scenic views of Lake Superior; a spectrum of cultural resources focused on the human use of Lake Superior and its shoreline; and a variety of affordable year-round recreational opportunities for appropriate public use. The significance and importance of each resource, based on the national lakeshore's enabling legislation, is discussed under the analyzed resource sections below.

The impact topics carried forward and analyzed for the selected alternative in the Revised EA and for which a non-impairment determination is contained in this attachment are water resources, air quality, acoustic environment and soundscapes, wildlife and wildlife habitat, special-status species, and ethnographic resources. A non-impairment determination is not made for visitor use and experience, visitor safety, or wilderness because those impact topics are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired the same way that an action can impair park resources and values. Each resource or value for which impairment is assessed and the reasons why impairment will not occur is described below.

WATER RESOURCES

Water quality modeling was performed to determine the amount of four pollutants (benzene, benzo(a)pyrene, naphthalene, and 1-methylnaphthalene) that would be discharged to Lake Superior during PWC use under the selected alternative. These results were compared to human health criteria and ecological toxicology benchmarks for each pollutant. Using values for carbureted two-stroke PWC engines, which discharge unburned gasoline and gasoline additives directly into the water, the results show that pollutants generated by PWC use under the selected alternative are so low that none would be present in sufficient quantity to come close to the human health criteria or ecological benchmark levels, allowing the water quality of the national lakeshore to remain high. The estimates of pollutant discharge assume that 100% of the PWC use at the national lakeshore would be those that contain older, carbureted two-stroke engines. This likely overestimates the level of pollution, as it is reasonable to expect some of the PWCs currently in use at the lakeshore contain direct injection two-stroke or four-stroke engines, which do not discharge fuel directly into the water. This approach is a conservative estimate since data on the actual machines in use at the national lakeshore is not available. The selected alternative will continue to have a slight adverse impact on water quality, as the pollutant loads from benzene and other pollutants associated with gasoline in the national lakeshore will be the same as current conditions; however, the very low levels of pollutants generated by PWCs will not affect human health or aquatic organisms. Impacts of PWC use to water quality will be localized in the Sand Point segment, where PWC use is currently allowed and would continue to be allowed under the selected alternative. Due to the low level of PWC use at the park, the relatively short PWC use season, and the large volume of water in the system, impacts on water quality would be minimal. In the future, as older PWCs are retired and replaced with newer PWCs, water quality impacts from PWC use would decline.

Water quality within the national lakeshore will continue to exist in a condition similar to its current state and will continue to support a healthy aquatic ecosystem. Current and future generations of visitors will continue to have opportunities to experience these aquatic resources. Therefore, implementation of the selected alternative will not result in impairment to water resources.

AIR QUALITY

Pictured Rocks National Lakeshore is in an area designated as "attainment" of the National Ambient Air Quality Standards (NAAQS) for all six criteria pollutants, the most common air pollutants that threaten human and environmental health. There is no baseline information on ambient air quality parameters within the park boundary, but the air quality in the vicinity is considered to be quite good. The airborne

pollutants related to PWC use that could affect human health include carbon monoxide, particulate matter, and ozone; visibility and biological resources at the national lakeshore could be affected by the release of ozone, nitrogen oxides, and particulate matter. Air emissions modeling for PWC use was conducted using peak PWC use of carbureted two-stroke engines to analyze a worst-case scenario. Actual emission rates are likely to be considerably lower because PWC use is much lower on average days and some days there is no PWC use at the national lakeshore. Further, not all PWCs used at the park have the older carbureted two-stroke engines, and direct injection engines have reduced air emissions. The modeling results show that the annual emissions rates for all criteria pollutants, as well as volatile organic compounds (a precursor to ozone), were below the *small* or *very small* screening thresholds for attainment areas as presented in the NPS *Technical Guidance to Assessing Impacts to Air Quality in NEPA and Planning Documents*. The annual carbon dioxide emission rate was also modeled and although higher than the *small* screening threshold, the emission rate is orders of magnitude lower than the stationary source significance emission rate level. This indicates that the amount of carbon dioxide contributed to the environment by annual PWC use would be minimal.

While adverse effects on air quality will continue to occur under the selected alternative, the impacts will be minimal. Air quality within the park will continue to exist in a condition similar to its current state, and the national lakeshore will continue to provide “extraordinary and inspirational scenic vistas of Lake Superior,” one of the elements of the national lakeshore’s significance, as stated in the *Pictured Rocks National Lakeshore General Management Plan and Wilderness Study*. Current and future generations of visitors will have similar opportunities to experience good air quality, and thus visibility, at the national lakeshore. Therefore, implementation of the selected alternative will not result in impairment to air quality.

ACOUSTIC ENVIRONMENT AND SOUNDSCAPES

The analysis of the impacts of PWC use on the acoustic environment and soundscapes included modeling of expected PWC noise levels, which were compared to existing baseline conditions at the national lakeshore and noise levels that could affect human behavior. PWC use varies and includes transiting, playing, idling, acceleration, and deceleration. PWC noise differs from most other watercraft due to the style in which PWCs are operated, which can result in a higher level of impact, especially for PWCs operated in play mode. Monitoring data indicates that noise resulting from PWC use between the western boundary of the national lakeshore near Sand Point to the east end of Miners Beach does not dominate the soundscape at the national lakeshore, particularly when compared with other sources of noise (such as other motorized watercraft). Overall, noise from PWC use will continue to have an impact on the national lakeshore, as the PWCs will be audible above the existing ambient sound at times, particularly when larger numbers of PWCs travel together or during play behavior. However, there would be no new noise impacts from PWC use under the selected alternative because the area available to PWC use would remain the same as the current use area.

Because of the small PWC use area (approximately 8 miles of the park’s 42-mile shoreline), low level of PWC use, and the infrequency of use (summer months, weekends, daylight hours), impacts to soundscapes and the acoustic environment will be minimal. Current and future generations of visitors will continue to experience the acoustic environment of the national lakeshore in a similar manner to current conditions. Therefore, implementation of the selected alternative will not result in impairment to acoustic environment and soundscapes.

WILDLIFE AND WILDLIFE HABITAT

The national lakeshore contains varied habitats that support many wildlife species both seasonally and year-round. The species that are most susceptible to being adversely affected by PWC use include those that use the open water, shoreline, and areas adjacent to the shoreline, namely birds and small mammals. The noise generated from PWC use will have adverse effects on wildlife, as it could cause alarming or flushing, which could lead to changes in natural behaviors. PWCs at play will have the greatest impact on wildlife, as the higher sound levels will reduce listening areas and could interrupt communication between and among species. Birds that float on the water are at risk for injury from collisions, although this risk is low. The adverse impacts on wildlife from PWC under the selected alternative will remain similar to those currently occurring in the area between Sand Point and Miners Beach. This portion of the national lakeshore is popular and is used heavily by visitors on the water using other motorized watercraft, canoes and kayaks, and visitors using the shoreline for beach activities. Wildlife and wildlife habitat in this area will continue to be adversely affected by other visitor activities, as well as by PWC use. However, due to the low level of PWC use, the short period of peak PWC use (daytime hours during the summer months), the limited area open to PWCs under the selected alternative (8 of 42 miles), and the 200-foot flat wake zone along all shorelines, the impacts on wildlife from PWC use would be minimal.

Because impacts to wildlife will remain similar to those that are currently occurring in the PWC use area, wildlife and wildlife habitat within the park will continue to exist in a condition similar to its current state. Current and future generations of visitors will have similar opportunities to experience the wildlife at the national lakeshore, which is a scientifically recognized assemblage of flora and fauna representative of associations unique to the Lake Superior Basin. Therefore, implementation of the selected alternative will not result in impairment to wildlife or wildlife habitat.

SPECIAL-STATUS SPECIES

The federally-listed piping plover and state-listed bird species (common loon, bald eagle, osprey, peregrine falcon, and merlin) will be adversely affected by the selected alternative through PWC noise and presence, as well as through a small number of PWC users beaching their vessels and engaging in activities onshore. These impacts are the same as those described for wildlife in the previous section and include alarming, flushing, a reduction in listening area, and changes in natural behaviors. The PWC use area is and will continue to be a high use area for a variety of visitors, including beach goers, swimmers, kayakers, canoers, and those that use other motorized watercraft. Special-status species are affected by human presence and anthropogenic noise. Impacts from PWC use would only occur along the 8-mile section of shoreline open to PWC use under the selected alternative, leaving 34 miles of shoreline unaffected by PWC use. This, combined with the low level of PWC use at the national lakeshore, the short period of peak PWC use (daytime hours during summer months), and the 200-foot flat wake zone, would keep impacts on special-status species to a minimum.

Although adverse effects on special-status species will occur under the selected alternative, the NPS will be able to continue to provide protection to these species under the selected alternative. Special-status species within the park will continue to exist in a condition similar to the current state, and current and future generations of visitors will have similar opportunities to experience these species. Therefore, implementation of the selected alternative will not result in impairment to special-status species.

ETHNOGRAPHIC RESOURCES

The national lakeshore contains natural and cultural resources that are significant to the Chippewa, including plants, animals, minerals, landforms, and waterways. The selected alternative will result in minimal adverse impacts on ethnographic resources. A small number of PWC users could adversely

impact natural resources important to the Chippewa when they beach their PWCs and engage in activities on land. PWC noise could also affect ethnographic resources, especially during the permitted use of ethnographic resources, such as traditional ceremonies. However, impacts will be minimize through the use of boat patrols during the permitted use of ethnographic resources and through increased education. Overall, ethnographic resources at the park will continue to exist in a condition similar to the current state, and the NPS will be able to manage the national lakeshore to protect the “spectrum of cultural resources focused on the human use of Lake Superior and its shoreline,” as stated in the park’s significance statement. Current and future generations of visitors will have similar opportunities to appreciate ethnographic resources at the national lakeshore as they do under current conditions. Therefore, implementation of the selected alternative will not result in impairment to ethnographic resources.

SUMMARY

As described above, adverse effects and environmental impacts anticipated as a result of implementing the selected alternative will not rise to levels that will constitute impairment of park values and resources at Pictured Rocks National Lakeshore.