

National Park Service
U.S. Department of the Interior



Gulf Islands National Seashore

Record of Decision

Personal Watercraft Plan

Recommended:

Date:

Daniel R. Brown

08-13-19

For

Daniel R. Brown
Superintendent
Gulf Islands National Seashore

Approved:

Date:

Robert A. Vogel

8-13-19

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RECORD OF DECISION

Gulf Islands National Seashore Final Personal Watercraft Plan / Environmental Impact Statement

INTRODUCTION

The US Department of the Interior, National Park Service (NPS), has prepared this Record of Decision (ROD) on the Gulf Islands National Seashore Final *Personal Watercraft Plan / Environmental Impact Statement* (plan/EIS).

This ROD was prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations (40 CFR 1500–1508), the Department of the Interior’s NEPA regulations (43 CFR 46), and the 2015 NPS NEPA Handbook. This ROD includes a summary of the purpose and need for action; a synopsis of alternatives considered and analyzed in detail; a description of the selected alternative; the basis for the decision; and a description of the environmentally preferable alternative. This ROD is not the final agency action for those elements of selected alternative that require promulgation of regulations to be effective. Promulgation of such regulations will constitute the final agency action for those elements of the selected alternative.

BACKGROUND

In May 1998, the Bluewater Network filed a petition urging NPS to initiate a rulemaking process to prohibit personal watercraft (PWC) use throughout the national park system. On March 21, 2000 (65 FR 15077), NPS issued a regulation prohibiting PWC use in most national park system units and required 21 other units, including Gulf Islands National Seashore (national seashore), to determine the appropriateness of continued PWC use. However, the regulation allowed PWC use to continue for 2 years at the 21 units while the determinations were being made by NPS. During this 2-year period, the NPS evaluated the effects of PWC use at the national seashore. The results of the evaluation, dated October 17, 2001, concluded that the NPS lacked specific evidence to support proposing unit-specific regulations to allow PWC use at the national seashore in the waters over which it has regulatory authority. On April 22, 2002, after the 2-year grace period, NPS closed the national seashore to PWC use, based on the national PWC rule (then codified at 36 CFR 3.24, now at 36 CFR 3.9) until a planning process could be completed. The planning process included proceeding with a special regulation as required by the final rule, and an environmental assessment (EA). In 2004 NPS completed the EA, which evaluated a range of alternatives and strategies for the management of PWC use within the national seashore. As a result of the process, NPS recommended authorizing PWC use under a special regulation with additional management prescriptions. NPS published the final regulation (36 CFR 7.12) in the Federal Register in May 2006 (71 FR 26232).

In 2008, Bluewater Network and others filed a lawsuit claiming that the EA violated NEPA, the NPS Organic Act, and the Administrative Procedure Act. On July 8, 2010, the US District Court for the District of Columbia found that the impact analysis in the EA was inadequate (*Bluewater Network v. Salazar*, 721 F. Supp.2d7 (D.D.C. 2010)). However, the court did not vacate the PWC rule, so that PWC use was, and is, still allowed. The court remanded to NPS “so that it may have an opportunity to provide adequate reasoning for its conclusions.” As a result, NPS decided to readdress PWC use with a more comprehensive environmental impact statement (EIS).

PURPOSE AND NEED FOR ACTION

The purpose of the plan/EIS is to evaluate PWC use at the national seashore to ensure the protection of natural and cultural resources, provide a variety of visitor use experiences, minimize conflicts among various users, and promote the safety of all visitors, consistent with the national seashore's enabling legislation, mission, purpose, and goals. Action is needed to address the inadequacies in the 2004 EA (NPS 2004a), as identified in the 2010 US District Court opinion (see background discussion above).

ALTERNATIVES CONSIDERED

Alternatives analyzed in the plan/EIS were developed based on the alternatives in the 2004 EA (NPS 2004a) and on the results of internal and public scoping for the plan/EIS. The plan/EIS analyzes five alternatives, including a no-action alternative which would prohibit PWC use at the national seashore. The four action alternatives all allow PWC use to continue at the national seashore with varying flat-wake zone distances and allowable PWC use areas. The five alternatives are briefly described below. A detailed description of all alternatives analyzed is provided in Chapter 2 of the plan/EIS.

Alternative A

Alternative A, the no-action alternative, would prohibit PWC use in the national seashore.

Alternative B

Under alternative B, NPS would revise the special regulation in 36 CFR 7.12 to allow PWC to operate in the same manner as all other motorized watercraft per the Superintendent's Compendium (NPS 2019). The existing 300 yard flat-wake zone and 0.5 mile flat-wake zones from the wilderness islands in Mississippi would be essentially eliminated. The only flat-wake zones or closures in effect would be those contained in 36 CFR Section 3.6 and in the Superintendent's Compendium, which apply to motorized watercraft.

Alternative C

Under alternative C, the special regulation in 36 CFR 7.12 (2006) would be retained to allow PWC use. Existing 300 yard flat-wake zones and 0.5 mile flat-wake zones for PWC adjacent to the wilderness islands would continue to be in effect.

Alternative D

Management of PWC under alternative D would be the same as alternative C, except for the provisions regarding flat-wake zones and beaching on wilderness islands. Specifically, within the boundaries of the national seashore, PWC would not be allowed to operate at greater than flat-wake speed at areas within 150 yards from all shorelines in the Florida District and 300 yards in the Mississippi District. PWC would not be allowed to beach or land on the designated wilderness islands of Horn or Petit Bois.

Alternative E

Under alternative E, the special regulation in 36 CFR 7.12 would be revised to include additional natural and cultural resource protections, as well as requirements for compliance with the 2010 US Environmental Protection Agency (EPA) *Marine Spark-Ignition Engines and Vessels – Exhaust Emission Standards*. Therefore, PWCs would not be allowed at the national seashore unless they meet the 2010 EPA emission standards. This emissions requirement would begin two years after publication of the final PWC rule.

This alternative would also close the following areas to PWC use: the Davis Bayou area; the northern shores of Ship Island; 300 yards around Horn and Petit Bois Islands; the northern shores of Perdido Key; the eastern edge of Perdido Key; the northern shores of Santa Rosa Island including the area between Navarre Beach and Okaloosa Island, but excluding the area west of the Ferry Pier on the western side of Santa Rosa Island; the northern and southern shores of Naval Live Oaks; the northern shores of Santa Rosa Area; and Crab Island.

SELECTED ALTERNATIVE

The NPS has selected alternative D for implementation.

The number of PWC allowed, enforcements and outreach, and noise and emission standards under the selected alternative are described below.

Allowable Times of PWC Use. No person may operate a PWC between sunset and sunrise.

PWC Use Numbers and Regulations. The number of PWC operating at the national seashore at any one time will not be restricted. Federal and state vessel regulations would continue to apply within the national seashore and are listed in appendix B of the plan/EIS.

Enforcement and Outreach. The national seashore will continue joint water patrols and enforcement, in conjunction with cooperating agencies and commissioned staff, on a regular basis, which would include enforcement of PWC regulations as applicable. These water patrols will help ensure compliance with PWC closures and adherence to flat-wake zones, and will address public safety concerns related to PWC use. In addition, the national seashore will continue enforcement of federal regulations pertaining to harassment of marine mammals (Marine Mammal Protection Act and Endangered Species Act (ESA)) through ongoing and joint water patrols involving national seashore and state commissioned law enforcement authorities. Appendix C of the plan/EIS describes additional education and outreach activities associated with PWC regulations and resource protection.

Launch Sites. There will be no change to the number or location of current vessel launch sites (Okaloosa and Perdido Key in Florida, and Davis Bayou in Mississippi) located within the national seashore.

Noise Standards. All PWC will be required to comply with 36 CFR 3.15, which states: "A person may not operate a vessel at a noise level exceeding:

1. 75 dB(A) (A-weighted decibel) measured utilizing test procedures applicable to vessels underway (Society of Automotive Engineers SAE--J1970); or
2. 88 dB(A) measured utilizing test procedures applicable to stationary vessels (Society of Automotive Engineers SAE--J2005).

Closures and Flat-Wake Zones. Management of PWC under alternative D will continue under the regulations at 36 CFR 7.12 (2006), except for the provisions regarding flat-wake zones, which would be revised as follows:

- Within the national seashore, PWC would not be allowed to operate at greater than flat-wake speed at areas within 150 yards from all shorelines in the Florida District and 300 yards in the Mississippi District. This modification is intended to provide consistency throughout the national seashore to provide more efficient enforcement and ease of understanding for the visitor. National seashore law enforcement staff may place temporary floating buoys in the water as reference points to show PWC users what 150 yards and 300 yards from the shoreline looks like. This would be done on an as-

needed basis, determined by national seashore personnel, and would likely occur on select high-use days and weekends.

- PWC may not beach or land on the designated wilderness islands of Horn or Petit Bois.

BASIS FOR DECISION

The selected alternative will allow PWC use to continue under the current special regulation with modifications to flat-wake zone distances in certain locations. By continuing to implement flat-wake zones, alternative D would continue to protect natural resources, such as wildlife and submerged aquatic vegetation (SAV), and cultural resources along the shoreline. The closure of Horn and Petit Bois Islands to PWC landings would provide benefits to the qualities of wilderness present on those islands. The 150-yard flat-wake zone in the Florida District would minimize impacts to commercial PWC rental businesses and visitor experience for PWC users. Implementation of flat-wake zones would continue to minimize conflicts between various users of the national seashore and promote the safety of all visitors. Establishing consistent flat-wake zone distances for each district should result in easier enforcement of and increased compliance with flat-wake zones. By allowing PWC use to continue at the national seashore, a variety of visitor experiences would be available to the public in a manner that is consistent with the national seashore's enabling legislation, mission, purpose, and goals. The NPS believes that PWC use as managed under the selected alternative is appropriate and will not lead to unacceptable impacts, as demonstrated by the impact analysis in the plan/EIS and the discussion in the attached Non-impairment Determination (NID).

Because the NPS believes that some level of PWC use is appropriate in the national seashore, the NPS did not select alternative A.

The NPS did not select alternative B because allowing for a flat-wake zone of 100 feet throughout the national seashore would increase impacts to SAV, wildlife and wildlife habitat, and threatened and endangered species. Alternative B could result in adverse impacts to natural resources, as PWC in extremely shallow waters directly adjacent to the shoreline could disrupt habitat and potentially contribute to the decline of SAV within national seashore boundaries. Although studies specific to PWC-related impacts on SAV are limited, there is sufficient evidence to suggest that PWC use can result in damage to SAV if PWC come into direct contact with SAV or its associated sediments by running aground, pulling SAV plant material into the engine intakes, or blowing away sediments. The potential for these types of impacts increases in the shallower waters within 100 feet of the shoreline. Reducing flat-wake zones to 100 feet would also substantially increase adverse impacts to the acoustic environment, visitor experience, and wilderness character from PWC-related noise.

The NPS did not select alternative C because it would not provide consistent, scientifically-based flat-wake zone distances and did not include PWC landing restrictions on the wilderness islands.

The NPS did not select alternative E because it would have the greatest level of impact on the visitor experience of PWC users due to the extensive flat-wake zone distances, the amount of areas closed to PWC use, and the banning of 2-stroke carbureted PWCs. Alternative E would also substantially impact PWC rental companies that operate in national seashore waters due to increased PWC closures and flat-wake zone distances. The variable flat-wake zone distances and extensive areas closed to PWC use would also make enforcement and compliance much more difficult than either existing conditions or the selected alternative.

The selected alternative, alternative D, is grounded in best available science and represents a balanced approach to PWC use within the national seashore, providing a positive visitor experience while protecting natural resources, and minimizing impacts to commercial PWC rental businesses.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in the ROD for public review. The NPS, in accordance with NEPA regulations, defines the environmentally preferable alternative as the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources (43 CFR 46.30).

After completing the environmental analysis, the NPS identified alternative E as the environmentally preferable alternative. Alternative E would require PWCs to comply with the 2010 EPA emissions standards, which would result in beneficial impacts to water quality, air quality, and the acoustic environment. Similarly, the additional areas closed to PWC use and shorelines where PWC would be prohibited from landing under alternative E would also result in increased benefits to SAV, wildlife, and threatened and endangered species.

CONCLUSION

Overall, among the five alternatives considered, the selected alternative (alternative D) best meets the purpose of and need for the plan/EIS, is expected to minimize impacts to water quality, wildlife and wildlife habitat, visitor experience, wilderness, and socioeconomics, and fulfills the NPS statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. The selected alternative incorporates all practical means to avoid or minimize environmental harm and will not result in the impairment of park resources or values or violate the NPS Organic Act.

This ROD is not the final agency action for those elements of selected alternative that require promulgation of regulations to be effective. Promulgation of such regulations will constitute the final agency action for those elements of the selected alternative.

ATTACHMENT A—NON-IMPAIRMENT DETERMINATION FOR THE SELECTED ALTERNATIVE

This non-impairment determination has been prepared for the selected alternative, as described in the Record of Decision for the final *Gulf Islands National Seashore Personal Watercraft Plan / Environmental Impact Statement* (plan/EIS).

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of the Interior and the National Park Service (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*, 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.

As stated in section 1.4.5 of the NPS *Management Policies 2006*, 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.” 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.”

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. Therefore, an action appropriate in one unit could impair resources in another unit.

As stated in section 1.4.5 of the NPS *Management Policies 2006*, 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;
- 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 significance and importance of each resource analyzed, based on the Gulf Islands National Seashore (national seashore) enabling legislation and 2014 General Management Plan, is discussed in the following sections. For the selected alternative, a determination of non-impairment is made for each of the impact topics carried forward for detailed analysis in the plan/EIS, with the exception of visitor use and experience, socioeconomics, and wilderness. A non-impairment determination is not made for visitor use

and experience, socioeconomics, or wilderness because these impact topics are not generally considered to be park resources subject to the non-impairment standard established by the Organic Act and clarified further in section 1.4.6 of *NPS Management Policies 2006*.

A description of the current state of each resource topic evaluated for impairment can be found in chapter 3 of the plan/EIS. Each resource or value for which non-impairment is assessed and the reasons that impairment will not occur are described below.

WATER QUALITY

The national seashore encompasses barrier islands, coastal mainland, and adjacent waters in Mississippi and Florida, and more than 80% of its total area is open water. Preserving water quality is an important part of the national seashore's purpose because water quality affects the health of park visitors and the viability of the ecosystem. Water quality at the national seashore is affected by numerous point and non-point sources of pollution. Personal watercraft (PWC) and other motorized watercraft contribute pollutants through gas and oil discharges and emissions from combustion exhaust which adversely affect water quality.

Emissions of pollutants of concern in gasoline and exhaust from PWC were estimated for the selected alternative and compared to existing water quality conditions and to appropriate water quality criteria and other ecotoxicological and human health toxicity benchmarks. Under the selected alternative, PWC use will add a small amount of hydrocarbons to national seashore waters during peak use periods. However, given the large volume of water available to dilute pollutants emitted by PWC, pollutant concentrations at the national seashore will be well below levels at which adverse impacts to human or ecosystem health are likely to occur. The volume of water needed to dilute all pollutants below toxicity threshold levels is less than 1% of the total available volume. The amount of hydrocarbons will be fewer during average use days, at night, and during the off-season when PWC use is reduced or non-existent. Water quality sampling performed in national seashore waters in the vicinity of PWC use areas show only a few detections of hydrocarbons, and at levels far below those of concern to human health or marine organisms. The sampling results support the conclusion reached in the impact analysis and demonstrates that these contaminants do not remain in the water column or are found in very low concentrations. Also, the continued natural replacement of older, more polluting PWC will result in improved water quality over the long term.

With actions permitted under the selected alternative water quality within the national seashore will continue to exist in a condition similar to its current state and will continue to support a healthy aquatic ecosystem that will be available for the enjoyment of current and future generations of visitors. Therefore, implementation of the selected alternative will not result in impairment to water quality at the national seashore.

AIR QUALITY

The national seashore is classified as a Class II airshed under the Clean Air Act. This air quality classification is the second most stringent and is designed to protect the majority of the country from air quality degradation. Only parks with Class I designations have specific directives to protect air quality under *NPS Management Policies 2006*. However, all parks must pursue measures to protect sensitive park environments from the adverse impacts of air pollution.

The NPS performed air quality modeling to quantify PWC pollutant emissions under the alternatives analyzed in the plan/EIS. As described in the plan/EIS, the results of air quality modeling indicated that there would be no meaningful impact on air quality at the national seashore from PWC use under the selected alternative. For all of the criteria pollutants modeled in the analysis, discharges attributable to

PWC use under the selected alternative were barely perceptible and would not result in any distinguishable adverse impacts to air quality.

The air quality analysis documented in the EIS took into consideration existing pollutant concentrations, the incremental impact of PWC and boat use, and total (cumulative) pollutant concentrations. The National Ambient Air Quality Standards (NAAQS) were considered as a guideline, but potential changes in air quality at concentrations below the NAAQS were also considered using the “percent below NAAQS” metric (recognizing NPS’s responsibility to protect air quality in parks). Although there could be small impacts to air quality in localized areas where PWC use is concentrated, modeling results indicate that the total concentration of all criteria pollutants will continue to be well below the NAAQS (by between 23 and 93%). The criteria pollutant that is most highly concentrated (23% under the NAAQS) is due entirely to background concentrations of that particular pollutant (particulate matter) and not as a result of PWC use under the selected alternative.

The air quality modeling results show that the contribution of PWC to pollutant concentrations is very small relative to existing background concentrations and that air quality conditions at the seashore would not be affected by implementation of the selected alternative in any perceptible way. Air quality at the national seashore will continue to remain in a state similar to current conditions and the contribution of pollutants from PWCs is expected to decline over time as older two-stroke PWCs continue to be replaced by cleaner four-stroke models, as demonstrated by the PWC registration data in the plan/EIS. Current and future generations of visitors will continue to have opportunities to experience air quality at the national seashore that will not be degraded by continuing to allow PWC use. Therefore, implementation of the selected alternative will not result in impairment to air quality.

ACOUSTIC ENVIRONMENT

The NPS conducted acoustic monitoring to characterize the current soundscape at the national seashore and analyze the anticipated change as a result of the selected alternative. A reduction in flat-wake zones in the Florida District and around the wilderness islands in the Mississippi District (Horn and Petit Bois islands) under the selected alternative will result in adverse impacts on the acoustic environment because PWC will be allowed to operate at high speeds closer to shorelines. In the Mississippi District, where the existing flat wake zone of 0.5 miles will be reduced to 300 yards adjacent to Horn and Petit Bois islands, impacts on the acoustic environment from PWC use will increase, although impacts will be limited due to the low level of PWC use around these islands. The prohibition of PWC landings on the wilderness islands under the selected alternative will most likely discourage PWC use in close proximity to them, resulting in reduced noise impacts compared to existing conditions. In the Florida District, reducing the flat-wake zone distance from 300 yards to 150 yards will result in greater noise impacts, because PWC use is much more frequent in Florida. Any increases in PWC noise under the selected alternative would occur on the northern (sound/bay) shores where the majority of PWC use occurs. The southern shores in the Florida District would mostly likely not be affected by PWC noise from reduced flat wake zones.

The reduction in flat-wake zone distance means PWC could operate at higher speeds closer to shore, generating greater noise (e.g., 6 dB increase in L_{max} from a two or four stroke PWC operating at 150 yards instead of 300 yards or a 3 dB increase in L_{eq}). However, PWC noise impacts would lessen over time from the natural replacement of older, louder two-stroke PWCs. No new areas would be open to PWC use under the selected alternative.

Even with the increased noise levels in the Florida District, current and future generations of visitors will continue to experience the acoustic environment of the national seashore in a manner similar to existing conditions. Although there would be adverse impacts to the acoustic environment from PWC use, these impacts would not prevent the national seashore from providing a variety of visitor experiences to the public in a manner that is consistent with the national seashore’s enabling legislation, mission, purpose,

and goals. Therefore, implementation of the selected alternative will not result in impairment to the acoustic environment at the national seashore.

SUBMERGED AQUATIC VEGETATION/SHORELINE VEGETATION

Submerged aquatic vegetation (SAV) beds at the national seashore provide important nursery habitat for many aquatic species and provide foraging grounds for federally protected species including sea turtles and manatees. A reduction in flat-wake zones for PWC under the selected alternative could impact SAV because PWC will be allowed to operate at full throttle in a greater amount of shallow-water SAV habitat than under existing conditions.

Adverse impacts to SAV can occur when PWC come into direct contact with SAV or its associated sediments by running aground, pulling SAV plant material into the engine intakes, or blowing away sediments. However, studies have shown that in a water depth of 3 feet or more, PWC showed little negative impact to seagrass beds and did not significantly affect erosion rates, when operated according to manufacturer recommendations.

The average horizontal distance from shorelines in the Florida district to the 3-foot depth contour is 150 yards, which means that the depth of the water within 150 yards of the shorelines in the Florida district of the national seashore is generally 3 feet or less. In Mississippi, the average horizontal distance to the 4-foot depth contour is 300 yards, which means that the depth of water within 300 yards is generally 4 feet or less. Therefore, under the selected alternative, flat-wake zones of 150 yards from the shorelines in Florida and 300 yards from the shorelines in Mississippi under the selected alternative will prevent impacts to the majority of SAV in the national seashore. Prohibiting PWC landings on wilderness islands will further reduce the potential for impacts to SAV because users would be less likely to enter shallow waters on those islands where impacts to SAV could occur.

Although full throttle PWC use will be allowed in a greater amount of shallow-water SAV habitat under the selected alternative than is currently allowed, impacts to SAV will be minimal because PWC do not have propellers, which can cause physical damage to SAV. Impacts could occur as a result of sudden starts in shallow-water SAV habitat, which can cause “blowouts.” However, such impacts will be intermittent and localized, and are not expected to result in noticeable impacts to large areas of SAV. PWC use under the selected alternative will not likely affect shoreline vegetation because salt marshes, the primary shoreline vegetation at the national seashore, are composed of extremely dense, sharp, and rigid vegetation and are not suitable environments for PWC use.

Overall, vegetation will remain in a state similar to existing conditions and will continue to be enjoyed by current and future generations. Therefore, the selected alternative will not result in impairment of SAV or shoreline vegetation at the national seashore.

WILDLIFE AND WILDLIFE HABITAT

PWC use can adversely affect wildlife and wildlife habitat both directly and indirectly, and impacts can vary widely depending on how and where PWC are operated and the species present. Reduced flat-wake zones for PWC under the selected alternative could result in increased impacts to wildlife and wildlife habitat because PWC will be allowed to operate at full throttle throughout a greater portion of the national seashore, and closer to the shoreline where impacts to wildlife are most likely to occur. Impacted species may include marine mammals, birds, fish, and their associated habitats.

Adverse impacts to wildlife as a result of the selected alternative will largely consist of disturbances or disruption of behaviors as a result of noise and visual disturbance associated with PWC use. Birds and marine mammals at the national seashore are more likely to be affected by the impacts of PWC use than

other species. Reduced flat-wake zones under the selected alternative could result in increased noise and visual disturbances closer to the shoreline, potentially causing birds to flush from their nesting, loafing, or foraging habitats.

Flat-wake zones in the Florida District will be reduced to 150 yards (450 feet). This is slightly less than the recommended buffer distance to avoid flushing of most bird species, which is 150 meters (approximately 500 feet). However, because the flat-wake zones will be nearly the recommended buffer distance, the resulting slight increase in PWC engine noise near shorelines where birds may be present is not expected to have a noticeable difference in impacts on birds compared to existing conditions. Impacts to birds from PWC use will not increase in the Mississippi District because flat-wake zones, although reduced to 300 yards (900 feet), will remain much greater than the recommended 150-meter buffer distance.

Dolphins and other marine mammals may be affected by underwater noise from PWC engines, which can cause panic responses, resulting in stress to individual animals and potential disruption of feeding or other behaviors. Because dolphins are common throughout seashore waters, disturbances are likely to occur on occasion, and will occur throughout a greater area under the selected alternative than under existing conditions because flat-wake zones will be reduced. However, since dolphins experience underwater noise primarily from motorboats and other recreational activities, and PWC use is not expected to increase meaningfully, there is not expected to be a change in overall health or productivity of dolphins or other marine mammals at the national seashore due to PWCs.

PWC collisions with dolphins are also possible, and the potential for collisions could increase under the selected alternative because PWC will be allowed to operate a full throttle throughout a greater portion of the national seashore. However, collisions with dolphins are not likely to occur due to the low draft of PWC when traveling at high speeds, the absence of a propeller, and the ability of PWC operators to change course to avoid collision. No PWC collisions with dolphins have been documented at the national seashore in the last 20 years.

Other impacts to wildlife and wildlife habitat under the selected alternative include the potential for physical damage to habitats due to landings or trampling during mounts and dismounts in shallow marine habitats, and temporary increases in turbidity. Although these shallow-water habitats could be impacted, these habitats are generally less sensitive than SAV habitats. Thus, direct impacts on soft-bottom habitats would likely be temporary and localized and habitats would quickly recover from temporary disturbances.

In the Mississippi District there will be beneficial impacts to terrestrial habitats compared to existing conditions, because PWC landing will be prohibited on wilderness islands under the selected alternative. There would be no increase in visitor access to terrestrial habitats in either district under the selected alternative, when compared to existing conditions.

Although the selected alternative will result in increased potential for adverse impacts to some wildlife species and habitats, the flat-wake zone distances would remain large enough to provide adequate protection for these species and any increases in potential impact are expected to be of low-intensity. Overall, the selected alternative is not expected to cause measurable population declines of any native species within the national seashore or result in destruction or substantial degradation of wildlife habitats. Wildlife and wildlife habitat will remain in a condition that can be enjoyed by current and future generations. Therefore, the selected alternative will not result in impairment of wildlife or wildlife habitat at the national seashore.

THREATENED OR ENDANGERED SPECIES AND SPECIES OF SPECIAL MANAGEMENT CONCERN

Species in the national seashore listed under the Endangered Species Act (ESA) that were evaluated for potential effects due to reduced flat-wake zones under the selected alternative include: Perdido Key beach mouse, West Indian manatee, piping plover, red knot, wood stork, American alligator, green sea turtle, hawksbill sea turtle, Kemp's ridley sea turtle, leatherback sea turtle, loggerhead sea turtle, gulf sturgeon, and saltmarsh topminnow. Potential effects on the bald eagle were also analyzed because the species is protected under the Bald and Golden Eagle Protection Act. The national seashore also contains critical habitat under the ESA for Perdido Key beach mouse, piping plover, and gulf sturgeon. Florida and Mississippi state-listed species in the national seashore that were evaluated for potential effects under the selected alternative include: American oystercatcher, black skimmer, brown pelican, least tern, little blue heron, Marian's marsh wren, peregrine falcon, reddish egret, southeastern snowy plover, and tricolored heron.

Management actions under the selected alternative will have no effect on Perdido Key beach mouse because this species occurs in dune habitats and not along shorelines where impacts associated with PWC use could occur. Reduced flat-wake zones under the selected alternative are not likely to adversely affect piping plover, red knot, wood stork, or any state-listed bird species because (see WILDLIFE above) flat-wake zones will remain sufficient to avoid flushing due to noise from PWC engines or visual disturbance. Targeted closures of bird habitat will further minimize impacts to piping plover and bald eagle. The selected alternative is not likely to adversely affect American alligator, or saltmarsh topminnow because flat-wake zones, even though reduced, will continue to limit impacts to coastal and marsh habitats where these species are found. Reduced flat-wake zones could increase the risk of impacts to manatees, sea turtles, and Gulf sturgeon because of disturbances due to underwater noise or potential collisions with animals could occur throughout a greater area of the national seashore. However, since there are already existing levels of noise due to motor boats and other recreational activities under existing conditions, there is not expected to be a change in overall health or productivity of manatees or other protected species at the national seashore. Collisions with wildlife, including manatees, sea turtles, and Gulf sturgeon, are not likely to occur due to the low draft of PWC when traveling at high speeds, the absence of a propeller, and the ability of PWC operators to change course to avoid collision. The selected alternative will not result in destruction or adverse modification to critical habitat for any ESA-listed species.

Overall, the selected alternative will not noticeably alter impacts on special-status species because the flat-wake zone distances, although reduced compared to existing conditions, will continue to limit the potential for direct and indirect impacts to those species and their habitats by reducing the likelihood of collisions, limiting PWC noise impacts on areas close to the shoreline, and minimizing temporary increases in turbidity. Any potential impacts are expected to be insignificant or discountable because they are extremely unlikely to occur or will be so small that they cannot be meaningfully evaluated. Through consultation under Section 7 of the ESA, the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration's National Marine Fisheries Service have concurred with the findings above for ESA-listed species and critical habitats. Although there will be potential for adverse effects on special-status species, the NPS will be able to continue to provide adequate protection to these species under the selected alternative. Special-status species within the national seashore 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 threatened or endangered species or species of special management concern at the national seashore.