

**National Park Service  
U.S. Department of the Interior**

**Gulf Islands National Seashore  
Florida and Mississippi**



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**General Management Plan / Environmental Impact Statement**

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**Record of Decision**

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Recommended:

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Daniel R. Brown  
Superintendent  
Gulf Islands National Seashore

Date:

A handwritten date "Aug. 18, 2014" in blue ink, written over a horizontal line.

Approved:

A handwritten signature in black ink, appearing to read "Stan Austin", written over a horizontal line.

Stan Austin  
Southeast Regional Director  
National Park Service

Date:

A handwritten date "9/11/14" in black ink, written over a horizontal line.



**UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE**

**RECORD OF DECISION**

**GENERAL MANAGEMENT PLAN /  
ENVIRONMENTAL IMPACT STATEMENT**

**Gulf Islands National Seashore**

**Florida and Mississippi**

The Department of the Interior, National Park Service (NPS), has prepared this “Record of Decision” (ROD) on the *Final General Management Plan / Environmental Impact Statement* (FGMP/EIS) for Gulf Islands National Seashore (“seashore”). This record of decision includes a background description of the project, a statement of the decision made, a list of mitigation measures to minimize environmental harm, a synopsis of other alternatives considered, the basis for the decision, a determination of nonimpairment of seashore resources and values for the preferred alternative, a description of the environmentally preferable alternative, and an overview of public and agency involvement in the decision-making process.

**BACKGROUND OF THE PROJECT**

Gulf Islands National Seashore was established by the U.S. Congress on January 8, 1971. Part of the national park system, the national seashore encompasses barrier islands and coastal mainland in Mississippi and Florida and stretches along 160 miles from Cat Island in Mississippi to the eastern end of Santa Rosa Island in Florida. The current authorized acreage for the national seashore is 139,175 acres, which includes 3,800 acres that are designated wilderness.

The national seashore’s existing management plan, completed in 1978, does not provide adequate guidance for current environmental, social, political, and legal conditions influencing management of the national seashore. The existing management plan does not address the addition of Cat Island or the addition of designated wilderness (Horn and Petit Bois Islands), and it also does not meet current NPS planning program standards. The current planning effort resulting in this Record of Decision included a range of alternative management strategies to address these issues as well as to address changing visitor use patterns, cultural resources, appropriate scale and type of seashore facilities, wildlife populations, threatened and endangered species, commercial services, and gateway community relationships. Goals of the planning effort included:

- Clearly define resource conditions and visitor experience to be achieved at Gulf Islands National Seashore.
- Provide a frame work for NPS managers to use when making decisions about how to best protect seashore resources, how to provide a diverse range of visitor experience

opportunities, how to manage visitor use, and what kinds of facilities, if any, to develop in the national park system unit.

- Ensure that this foundation for decision making has been developed in consultation with interested stakeholders and adopted by NPS leadership after an adequate analysis of the benefits, impacts, and economic costs of alternative courses of action.

The *Final General Management Plan / Environmental Impact Statement* presents four alternatives for the future management of Gulf Islands National Seashore. The alternatives, which are based on the seashore's purpose, significance, and special mandates, present different ways to manage resources and visitor use and improve facilities and infrastructure. The four alternatives are the no-action alternative (continue current management), alternative 2, alternative 3, and alternative 4. Alternative 3 has been identified as the NPS preferred alternative.

## **STATEMENT OF DECISION MADE (SELECTED ACTION)**

### **Summary**

With the selected action, labeled as the “NPS preferred alternative” in the *Final General Management Plan / Environmental Impact Statement*, the national seashore will be managed as an outdoor classroom for exploring the natural and human history of the Gulf of Mexico's barrier islands and coastal environments. Interpretive programs will focus on illustrating how barrier islands act as protectors of the mainland coastline and the part these islands have played in the last 5,000 years of historic human occupation. Management will also emphasize expanded research opportunities to help inform the educational and interpretive programs. The national seashore will establish a research learning center and develop an active stewardship program, while providing expanded educational and interpretive opportunities. The wild and undeveloped nature of the national seashore would be maintained while providing visitor access to seashore educational and recreational opportunities. Elements of this alternative will support the resilience of the national seashore to expected impacts from climate change, such as sea level rise, coastal erosion, and higher storm surges, all of which may affect cultural and natural resources as well as visitor experience at the seashore.

Specific management zones detailing acceptable resource conditions, visitor experience and use levels, and appropriate activities and development will be applied to seashore lands and waters consistent with this concept. The selected action will also seek to enhance resource protection; protect cultural resources such as the many coastal fortifications at the seashore; and improve collaboration with local, state, and federal partners.

## **MANAGEMENT STRATEGIES OF SELECTED ACTION**

Under alternative 3 (the selected action) Gulf Islands National Seashore will be managed as an outdoor classroom for exploring the natural and human history of the northern Gulf Coast while providing seashore recreational opportunities. Collaboration and cooperation among academia, visiting scientists, conservation organizations, and other agencies would be actively pursued to enhance resource management, stewardship, and understanding of the northern gulf coastal environment.

## **VISITOR EXPERIENCE**

Gulf Islands National Seashore will continue to provide opportunities for traditional beach activities and marine activities, as well as hiking, biking, auto touring, camping, picnicking, backcountry use, exploration of coastal fortifications, and other uses compatible with the protection of the national seashore's scenic, natural, and cultural values. These opportunities range from recreating with large groups within developed to semideveloped areas, to finding solitude within an undeveloped wilderness island setting.

Emphasis will be placed on using the national seashore as an outdoor classroom to provide visitors with expanded on-site learning opportunities. The national seashore will establish a research learning center and develop an active stewardship program while providing educational and interpretive opportunities that explore the role that natural systems and coastal fortifications have played in the area. History will be brought to life at selected coastal fortifications by actively presenting stories of important periods of their history. Visitors will also have guided and self-guided opportunities to explore coastal and barrier island ecology.

## **RESOURCE PROTECTION**

### **Natural Resource Conditions**

Natural resources will be managed to preserve the integrity of the national seashore's fundamental terrestrial, estuarine, and marine ecological resources while providing visitor access to seashore settings that best illustrate the natural evolution of geologic, environmental, and ecological processes and/or the area's collection of heritage resources. Exceptional and critical natural resources and processes will continue to be managed to preserve their intrinsic values. As funding permits, these areas will continue to be inventoried, evaluated, monitored, protected, and preserved in accordance with NPS policies and legislative and executive requirements. Strategies will continue to be developed to protect resources and conduct data collection where threats have been identified. Restoration efforts will focus on reestablishing natural resource conditions that have been altered or impacted by human activity; however, natural resource manipulations will continue in areas surrounding coastal fortifications to ensure protection from threats to their stability and integrity posed by continuing shoreline changes.

The key component for achieving the desired natural resource conditions under this alternative will include establishing a marine management program to inventory and monitor the overall marine environment, including submerged cultural resources. To support this initiative, collaboration, coordination, and cooperation among a consortium of academia, visiting scientists, conservation organizations, and other agencies will be encouraged and actively pursued. This will also include hosting symposiums to promote coastal resource management, stewardship, and understanding of the northern gulf coastal ecosystem. Enhanced scientific study and research will accelerate the awareness of the national seashore's ecological health and vitality, anticipate/adapt to the effects of climate change, promote restoration of disturbed sites, improve communication with the public about the dynamic natural processes of the area, and inform the expanded educational programs envisioned under this alternative. Restoration will use emerging information related to natural resources and natural processes and will help eliminate identified adverse effects to these resources.

Also under this alternative, natural resources could be modified to restore cultural landscape characteristics to enhance education and interpretive opportunities.

## Cultural Resource Conditions

Under this alternative, a cultural resource management program will be established to complement the marine management program discussed above. Cultural landscapes and submerged cultural resources will be identified and documented, and preservation strategies will be developed. All accessioned museum objects pertinent to the national seashore, except for archeological artifacts stored at the NPS Southeast Archeological Center in Tallahassee, Florida, will be consolidated in one multipark and jointly administered facility as identified in the 2006 NPS Southeast Region Collections Management Plan. This consolidation of museum objects includes the national seashore's natural history collections as well.

Selected historic forts, artillery batteries, and associated structures will be rehabilitated to portray their appearance/function during a specific operational period(s). Actions will not alter the integrity of historic properties to allow for the enhancement of visitor experience. Extensive acquisition of natural and cultural museum objects will be used to document the regional gulf coast environment and serve as an important component of the national seashore's interpretive program and regional information base.

Similar to alternative 1 and as funding permits, the national seashore will continue to inventory areas that have not yet been documented. These resources will be evaluated, monitored, and protected in accordance with the NPS historic preservation policies and legislative and executive requirements. Strategies will continue to be developed to stabilize resources or to conduct data collection where threats have been identified.

## KEY HIGHLIGHTS OF THE PREFERRED ALTERNATIVE

### In the Florida Units:

- Develop a new research learning center at **Naval Live Oaks**.
- Develop a tent camping only loop at **Fort Pickens Campground**.
- Rehabilitate the **Fort Pickens Lifesaving Station** to teach visitors about the historic Lifesaving Service.
- Move the **Fort Pickens** campground registration to a new building at the campground store site.
- Rebuild **Fort Pickens Road**, if feasible, after major storms.
- Rebuild parts of **Johnson Beach Road** after major storms.
- If the **Pensacola Lighthouse** is transferred to the National Park Service, provide interpretive opportunities there.
- Provide educational opportunities through use of a mobile vehicle at **Okaloosa and Perdido Key**.

### In the Mississippi Units:

- Restore the open space near **Davis Bayou Campground** to a more natural environment.
- Develop a tent camping only loop at **Davis Bayou Campground**.

- Consider development of a multiuse pedestrian/bicycle trail along **Park Road**.
- Evaluate closure of the **VFW road** to vehicles to assure pedestrian and bicycle safety.
- Complete land acquisition and secure access for visitor and administrative use at **Cat Island**.
- Develop a permit system for overnight camping at **Cat Island** and **East and West Ship islands**.
- Protect wilderness values on **Horn and Petit Bois islands** with new monitoring efforts.

## **MANAGEMENT ZONES**

The primary building blocks for a general management plan are the management zones. All zones are developed within the scope of the park's purpose, significance, mandates, and legislation.

Management zones prescribe how different areas of the national seashore would be managed. Each management zone specifies complementary natural resource conditions, cultural resource conditions, opportunities for visitor experience and appropriate facilities, and combines these into a possible management strategy that could be applied to locations within the national seashore. As such, management zones give an indication of the management priorities for various areas. The following six management zones have been developed for the national seashore: (1) diverse visitor opportunity zone; (2) recreational beach zone; (3) natural settings with dispersed recreation zone; (4) seagrass bed zone; (5) nonmotorized, primitive visitor opportunity zone; and (6) national seashore operations zone.

### **Diverse Visitor Opportunity Zone**

The diverse visitor opportunity zone includes areas capable of absorbing a diverse range of outdoor recreation and interpretive visitor opportunities intermixed within both natural and developed environments. Visitors are provided a variety of services including orientation, education, and other structured activities.

### **Recreational Beach Zone**

The recreational beach zone accommodates traditional recreational beach activities and facilities. Recreational beaches are defined as those beach areas that correlate with a parking lot, boardwalk or trail, and where the public is invited to participate in sunbathing, beachcombing, sand sculpture, swimming, and other customary recreational pursuits, and where such activities are frequent and commonplace.

### **Natural Settings with Dispersed Recreation Zone**

The natural settings with dispersed recreation zone includes areas largely undeveloped, in their natural settings, and managed for dispersed motorized and/or nonmotorized recreational activities.

## **Seagrass Bed Zone**

The seagrass bed zone includes areas containing seagrass beds, submerged aquatic vegetation, and/or habitat areas suitable for seagrass establishment. These areas are managed to prevent resource damage to seagrass beds from vessel groundings, anchoring, and propeller scarring.

## **Nonmotorized, Primitive Visitor Opportunity Zone**

The nonmotorized, primitive visitor opportunity zone is undeveloped, primitive, intact wildlands managed to perpetuate their natural settings. These areas include the Gulf Island Wilderness (Horn and Petit Bois islands) as well as other areas of the national seashore that will be managed in a similar way.

## **National Seashore Operations Zone**

The national seashore operations zone includes areas of low resource sensitivity reserved for administrative and maintenance support of national seashore operations.

# **MITIGATION MEASURES TO MINIMIZE ENVIRONMENTAL HARM**

In the legislation that created the National Park Service, Congress charged the agency with managing lands under its stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (National Park Service Organic Act). As a result, the National Park Service routinely considers and implements mitigation measures whenever activities that could adversely affect the resources or systems are anticipated. Mitigation means to take action to avoid, reduce, or compensate for the effects of environmental damage.

A common set of mitigation measures will be applied to the action alternatives in this General Management Plan. The National Park Service will avoid, minimize, and mitigate adverse impacts whenever practicable.

## **GENERAL**

New facilities (e.g., campsites, trails, bicycle trails) will be sited to minimize impacts on resources, including avoiding wetlands and sensitive areas and placing new facilities as close to existing disturbances as feasible. Before any construction activity, construction zones will be identified with temporary fencing to confine disruptions to the minimum area required. All protection measures will be clearly stated in the construction specifications, and workers will be instructed to avoid areas beyond the fencing.

Construction activities will implement standard soil erosion and stormwater runoff prevention methods such as use of silt fencing to avoid erosion and runoff in flowing water environments or during rain events.

Outdoor lighting for new or rehabilitated facilities will be the minimum amount required for personal safety. Lights will also be shielded and/or directed downward to minimize impact on the night sky. Best available technology, such as low-pressure sodium lights, will be incorporated into outdoor lighting.

Standard noise abatement measures will be implemented, as appropriate, during park operations and construction activities. Examples include scheduling activities so that impacts are minimized, use of the best available noise control techniques, use of hydraulically or electrically powered tools, and situating noise-producing machinery as far as possible from sensitive uses or resources.

## CULTURAL RESOURCES

The National Park Service will preserve and protect, to the greatest extent possible, the cultural resources of Gulf Islands National Seashore. Specific mitigating measures will include the following:

- Continue to develop inventories for and oversee research about archeological and historical resources (structures and cultural landscapes) to better understand and manage the resources. Continue to manage cultural resources and collections following federal regulations and NPS policies and guidelines. Maintain the national seashore's museum collection in a manner that will meet NPS curatorial standards.
- Subject proposed projects to site-specific planning and compliance. Make every effort to avoid adverse impacts through the use of *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. If adverse impacts could not be avoided, mitigate these impacts through a consultation process with all interested parties.
- As appropriate, archeological surveys and/or monitoring will precede any ground-disturbing activities. Known archeological resources will be avoided to the greatest extent possible during construction. If archeological resources that are listed in or are eligible for listing in the National Register of Historic Places could not be avoided, an appropriate data collection plan will be developed in consultation with the state historic preservation officer. If during construction, previously unknown archeological resources are discovered, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented and, if the resources cannot be preserved in situ, an appropriate mitigation strategy could be developed in consultation with the state historic preservation officer.
- The appearance and condition of historic structures before rehabilitation or restoration and changes made during treatment will be documented. Such documentation will be shared with the state historic preservation officer and added to the national seashore's cataloging system.
- Materials removed during rehabilitation efforts will be evaluated to determine their value to the national seashore's museum collections and/or for their comparative use in future preservation work at the sites.
- Before conducting any actions outlined in the alternatives identified in this General Management Plan that could affect cultural resources that are listed in or eligible for listing in the national register, the undertaking will be subjected to the requirements of 36 CFR 800 in compliance with section 106 of the National Historic Preservation Act of 1966 (as amended).

The National Park Service will therefore consult with the Florida or Mississippi state historic preservation officers, tribal representatives, and other interested parties.

## **NATURAL RESOURCES**

### **General**

Activities with the potential to disturb natural resources will be monitored for use-related impacts. Management options could range from (1) placing structures to limit impacts (e.g., sand ladders and boardwalks) or redirect visitors (i.e., fences), (2) education, and (3) guided activities, and (4) limiting access through a permit system.

### **Wetlands**

Trails and other developments will avoid wetlands and “Waters of the United States” (all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce) to the extent feasible. Where crossing or impingement upon wetlands is unavoidable, design and construction will minimize impacts on the wetlands. All potential impacts on wetlands will require state and federal permits. A wetland statement of findings will be prepared for all actions potentially impacting wetlands per NPS policies.

### **Geology and Soils**

Structures such as sand ladders, boardwalks, and sidewalks will be used to reduce impacts on the substrate, and silt fences will be used to control erosion and runoff. Steep slopes and inundated areas will be avoided.

### **Vegetation and Wildlife**

Trails/paths will be placed as close to existing disturbances as possible. The construction footprint will be minimized for both temporary and permanent impacts. Construction will take place outside peak breeding and nesting seasons.

### **Threatened and Endangered Species**

Surveys will be conducted, as appropriate, for threatened and endangered species and species of concern before ground-disturbing activities are undertaken.

Impacts on federally threatened or endangered species are analyzed in detail in the plan (see chapters 3 and 4 for details).

Current monitoring programs will be continued under all action alternatives, including but not limited to the following:

An active sea turtle monitoring program occurs primarily in the Florida District during the period May 1 to November 30 using replicate survey protocols for detecting and identifying nests soon after they become established. Each nest is identified and a protective enclosure perimeter established to maximize any inadvertent trampling by visitors or operational/management actions. Each nest is also posted with an informational sign to alert passersby to the nest and effectively close an approximately 5-meter square area to ingress/egress through the area for the approximate 60-day gestational period until hatchlings emerge and enter the ocean.

Mitigation for impacts on the critically endangered Perdido Key beach mouse will continue with actions defined in the Perdido Key Beach Mouse Recovery Plan, developed by the national seashore and U.S. Fish and Wildlife Service. These measures include maintaining boardwalk crossovers and installing rope barriers to discourage incidental take of the beach mouse and minimize habitat trampling.

As mitigation for impacts on gopher tortoises, barriers will continue to be installed to keep tortoises from crossing the roadway and being killed by vehicles. Mesh fences are currently used to discourage wayward turtles from wandering onto roadways. Burrows are also monitored as they become established to detect continued presence and absence. Periodically, comprehensive surveys, including marked recapture, are conducted to estimate population relative abundance and distribution.

During the period March through August, the national seashore is involved in a focused and committed effort to maximize the protection of shorebirds within both districts. These efforts are part of the NPS protection of species under the Endangered Species Act, the Migratory Bird Treaty Act, and related policies. Areas where concentrations of solitary nesting shorebirds (e.g., snowy plover) are identified, and where appropriate, establish perimeter closures to control access, prevent encroachment to the extent possible, and therefore minimize impacts. While vehicular traffic on the Fort Pickens and J. Earle Bowden Way roadways remains a concern with respect to mortality adjacent to shorebird nesting colonies from passing motorists, the Park continues to engage other regulatory agencies in coordinating efforts to reduce road kill. Specifically, the park in cooperation with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission meet on an annual basis to outline management actions, including

1. Implementation of speed limit reduction zones during the primary shorebird nesting period April through August.
2. Deployment of speed radar detection signs and message reader boards to alert motorist to adjacent shorebird nesting activities.
3. Installation of speed humps at strategic locations to better assure compliance with the speed limit reduction zones.
4. Hand out brochures at the Fort Pickens and Santa Rosa entrance stations seeking motorist cooperation to abide by the reduced posted speed limit zones (20 mph in some areas adjacent to long stretches of roadway where nesting colonies become established).
5. Increased law enforcement will continue during the shorebird nesting period in proximity to posted speed limit reduction zones in Florida, as well as increased patrols by staff on the islands.
6. Continue effort to install/convert to low pressure sodium lights (LPS) for all external lighting fixtures on seashore facilities to minimize artificial light pollution and reduce sea turtle disorientation.
7. Continue contributions to interagency outreach and education efforts to encourage landowners on the gulf coast to convert to LPS light fixtures.

8. Continue to provide press releases and news media encouragement to prepare feature stories about shorebirds and public cooperation.
9. Incorporate interpretive staffing to contact motorists directly.

Conservation measures will be undertaken to reduce potential impacts on federally listed species or candidate species as needed. Conservation measures will be implemented in consultation with the U.S. Fish and Wildlife Service and will be required if activities expected to have impacts on listed species or their designated critical habitat beyond those addressed in the plan were initiated.

Should any of the above events occur, renewed discussion and consultation with the U.S. Fish and Wildlife Service will focus on development of specific conservation measures to reduce potential impacts on these species and/or designated critical habitat. Such conservation measures will be based on the recommendations provided by the U.S. Fish and Wildlife Service on a project basis during consultation.

Conservation measures will likely include, but will not be limited to, the following:

- Protecting sensitive species by fencing or another system designed to prevent impacts from human activity and discourage predators.
- Restricting visitor use from certain breeding areas during the breeding season.
- Providing education about species and habitats and conservation.
- Designating alternate access points.
- Design and construction of structures or mechanisms for safe gopher tortoise movement such as road underpasses.

## **OTHER ALTERNATIVES CONSIDERED**

Other alternatives were considered during the planning process. The paragraphs below describe the concept and key features of these alternatives. More detailed information on these alternatives can be found in chapter 2 of the *Final General Management Plan / Environmental Impact Statement*.

### **ALTERNATIVE 1: THE NO-ACTION ALTERNATIVE**

The no-action alternative primarily reflects current conditions and activities at the national seashore. This alternative is provided as a baseline against which to compare the “action” alternatives. Under this alternative, current national seashore management direction would continue as guided by the 1978 management plan and subsequent more detailed implementation plans. NPS staff would continue to protect and maintain known cultural and natural resources as time and funding allow. Cultural and natural resource inventory work and monitoring would continue. NPS staff would continue to encourage and seek funding for the research that is needed to fill the gaps in knowledge about resources following the national seashore’s strategic plan.

## **ALTERNATIVE 2**

Under alternative 2, the national seashore would be managed to encourage, unimpeded, the dynamic coastal processes of the barrier island system. Except for continued preservation of nationally significant forts and essential ship channel dredging, visitor access, beach recreation, and management would yield to the changing natural environment. The opportunity to replace some roads with alternative transportation systems and to minimize developed facilities on barrier islands would be explored. Where appropriate, administrative and maintenance facilities would be relocated from the barrier islands to the mainland.

## **ALTERNATIVE 4**

The concept for management under alternative 4 would also include the restoration of services and facilities to pre-Hurricane Ivan conditions as outlined under alternative 1. In addition, the national seashore would be managed to provide a diversity of recreational and visitor educational opportunities for experiencing the Gulf of Mexico coastal environments. The National Park Service would seek to collaborate with educational and cultural institutions, nonprofit organizations, and commercial service operators to provide national seashore visitors a greater array of recreational and educational opportunities than what is currently being provided.

## **BASIS FOR DECISION**

After reviewing public comment on the preliminary range of alternative management concepts, the planning team proceeded to refine the alternatives by developing more specific descriptions for the type and general intensities of development (including access) for each of the national seashore's management areas. Once this was complete, the planning team analyzed the anticipated environmental consequences and estimated costs associated with implementing each alternative.

Five factors were developed to describe and distinguish the advantage values of each of the four alternatives:

Factor 1: Provide Quality Visitor Experience Opportunities

Factor 2: Protect Wilderness Values

Factor 3: Protect, Enhance, and Restore Gulf Coastal Ecosystems

Factor 4: Provide Socioeconomic Benefits to Nearby Communities

Factor 5: Improve Efficiency of NPS Operations

Analysis of these five factors indicated that alternative 3 provided the overall best value. A modified version of alternative 3 was selected as the preferred alternative by the regional director.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The National Park Service is required to identify the environmentally preferable alternative in its environmental impact analysis documents for public review and comment. The Park Service, in accordance with the Department of the Interior policies contained in the *Department Manual* (516 DM 4.10) and the “Council on Environmental Quality’s Forty Questions,” defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in the National Environmental Policy Act (section 101[b]). Section 101 states that “it is the continuing responsibility of the federal government to

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choices;
5. Achieve a balance between population and resource use which would permit high standards of living and a wide sharing of life’s amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

The alternatives do not differ much with respect to criteria 1 and 6; therefore, this evaluation focuses on criteria 2, 3, 4, and 5.

Alternative 1, the no-action alternative, represents “business as usual” and was included to provide a baseline against which to compare the effects of the other (action) alternatives. Alternative 1 partially meets criterion 2; the current imbalance between visitor amenities is not fully addressed. Alternative 2 partially realizes criterion 3 because it does not comprehensively address challenges in the areas of resource protection and visitor use that face the national seashore now and in the future. Alternative 1 also does not fully realize criterion 4 because it does not provide improved protections for and visitor access to historic, cultural, and natural resources. Alternative 1 does not address changes in visitation patterns at the national seashore.

Alternative 2 fully realizes criterion 2 because it emphasizes protection of cultural resources as well as a return to more natural processes in some areas of the national seashore. This alternative partially realizes criterion 3 because it allows for a high level of natural resource protection, but it may limit the widest range of beneficial uses by visitors in the long term. Alternative 2 partially meets criteria 4 and 5 by preserving important cultural and natural resources throughout the national seashore. However, it may limit individual choice in the long term because of diminished opportunities for visitor access—due to possible abandonment of Fort Pickens Road following a highly destructive storm and reduced visitor services on some of the barrier islands.

Alternative 3, the NPS preferred alternative, fully realizes criteria 2 and 3 by providing a wide range of visitor opportunities and safe and appropriate amenities. Compared to the other alternatives, alternative 3 provides the widest range of beneficial uses for research, resource protection, and visitor opportunities. Alternative 3 partially realizes criterion 4 because it preserves important resources and allows for a variety of individual choices. However, in some areas, natural resources

may be diminished to provide greater visitor opportunities such as visitor activities on the barrier islands that may cause adverse impacts on natural resources. Alternative 3 fully meets criterion 5 because it allows access by the large local and visitor populations to enjoy high-quality national seashore resources and amenities.

Alternative 4 partially meets criterion 2 by providing safe surroundings, but emphasis on visitor opportunities may diminish the experience for some visitors because of potential crowding and the greater presence of commercial services. Alternative 4 only partially meets criterion 3 because it does not provide a wide range of beneficial uses because emphasis is placed on visitor education and recreational opportunities and access. Alternative 4 only partially realizes criterion 4 because it preserves the most important historic, cultural, and natural resources, but some resources may be modified to provide the widest range of visitor opportunities. Because of the implementation of fees at the Okaloosa area and the emphasis on diversified recreation, alternative 4 only partially realizes criterion 5 because it may limit visitor access due to cost or enjoyment because of diminished resource values and crowding. However, this alternative may provide some visitors with enhanced enjoyment of life's amenities because of diversified education and recreational opportunities at the national seashore.

After considering the environmental consequences of the four management alternatives, including consequences to the human environment, the National Park Service has concluded that alternative 3, the NPS preferred alternative, is also the environmentally preferable alternative. This alternative best realizes the full range of national environmental policy goals as stated in section 101 of the National Environmental Policy Act.

## **PUBLIC AND AGENCY INVOLVEMENT**

This *Gulf Islands National Seashore Final General Management Plan / Environmental Impact Statement* was based on input from the National Park Service, other agencies, American Indian tribes, and the public. Consultation and coordination among these groups was vitally important throughout the planning process. The public had several avenues available to provide comments during the development of the plan, including public meetings, postal mail, e-mail, and the Internet. More detailed information on public involvement throughout the planning process can be found in chapter 5 of the *Final General Management Plan / Environmental Impact Statement*.

### **PUBLIC MEETINGS AND NEWSLETTERS**

#### **Public Scoping**

The National Park Service initiated public scoping for the general management plan in 2004 with a scoping newsletter, followed by a series of public open house events. The newsletter outlined the need for the general management plan, discussed the significance of the national seashore, provided a time line for the planning process, and outlined known planning issues to date. The newsletter also contained a public comment form and the dates for upcoming open house events. The newsletter was mailed to individuals, organizations, and government entities on the national seashore public contact mailing list in May 2004.

On May 25, 2004, the team issued a news release to local Mississippi and Florida newspapers announcing that open house events would be held on June 8, 2004, in Gulf Breeze, Florida; and on June 10, 2004, in Ocean Springs, Mississippi. Twenty-three individuals attended the Florida open house, including representatives from local businesses, environmental groups, and the military. Thirteen individuals participated in the Mississippi open house, including representatives from similar groups. Planning team members captured verbal public comments on flipcharts. Team members also encouraged the public to express their views by completing the public comment forms and turning them in at the public open house or mailing them in at a later time.

## **Hurricanes and Deferred Planning**

Between 2004 and 2007, the national seashore sustained heavy damage from a series of hurricanes, especially Hurricanes Ivan (2004) and Dennis, Katrina, and Rita (all 2005). The storms damaged or destroyed significant portions of the national seashore's infrastructure multiple times. Recovery and remediation efforts at the park demanded that the general management planning process be put on hold between 2004 and 2007.

## **Alternatives Development and Public Meetings**

In March 2007, the National Park Service restarted the planning process by issuing a second newsletter. The newsletter reiterated the need for the plan and the national seashore's purpose and significance. The newsletter also summarized planning issues collected through public scoping and presented preliminary conceptual management alternatives. The newsletter was sent to individuals, organizations, and government entities on the national seashore's mailing list and posted to the NPS public Planning, Environment, and Public Comment (PEPC) website. The national seashore received 47 comment forms, several pieces of written correspondence, and 19 postings on the PEPC website (<http://parkplanning.nps.gov/guis>).

In April 2007, the national seashore hosted additional public open house events to further explain and receive feedback on the preliminary conceptual alternatives. The national seashore issued a new release announcing the open house events on April 10, 2007. On April 17, the national seashore hosted an open house in Gulf Breeze, Florida, which was attended by 12 individuals. A second open house was held in Ocean Springs, Mississippi, on April 19, 2007. Six individuals attended the second meeting.

## **Public Update on Drafting of General Management Plan**

Using public feedback on the conceptual alternatives, the national seashore staff and planning team finalized the alternatives and began drafting a Draft General Management Plan / Environmental Impact Statement between 2007 and 2011.

In 2010, a third newsletter updating the progress made in preparing the plan was released. The team used feedback from the newsletter and public meetings to finalize the draft plan, which was published and released to the public in September 2011.

## **Release of the Draft General Management Plan / Environmental Impact Statement**

In 2011, the Draft General Management Plan / Environmental Impact Statement was sent to individuals, organizations, and government entities on the national seashore's mailing list and posted to the NPS PEPC website. The plan was initially open to public comments for a 60-day period from October 9 to November 9, 2011. This review period was extended by 30 days (until December 9, 2011) to allow for additional comments from the public due to questions and concerns over the plan. The national seashore received 27 comment forms, 22 pieces of written correspondence, 44 pieces of electronic correspondence, and 88 postings on the PEPC website (<http://parkplanning.nps.gov/guis>).

In fall 2011, the national seashore hosted public open house events to explain and receive feedback on the draft plan and environmental impact statement. The national seashore issued a news release announcing the open houses on September 14, 2011. On October 18, the national seashore hosted an open house at the Naval Live Oaks Visitor Center, which was attended by 22 people. A second open house was held on October 20, 2011, at the Davis Bayou Visitor Center, which was attended by six people. Due to public questions and concerns about the plan, two additional open house events were held. The national seashore issued a news release announcing these additional open house events on November 2, 2011. A third open house was held on November 8, 2011, at the Naval Live Oaks Visitor Center, which was attended by 107 people. A fourth and final open house was held on November 10, 2011, at the Davis Bayou Visitor Center, which was attended by 54 people.

## **AGENCY AND AMERICAN INDIAN CONSULTATION AND COORDINATION**

### **FEDERAL AGENCIES**

The National Park Service contacted the U.S. Fish and Wildlife Service (USFWS) offices in Mississippi and Florida, and the National Marine Fisheries Service (NMFS) on April 9, 2009. The letter advised these agencies of the NPS planning process for this *General Management Plan / Environmental Impact Statement* and requested a current list of federally listed threatened, endangered, or candidate species within the national seashore. The USFWS Panama City, Florida, office replied in a letter dated May 5, 2009, with updated species information and an Internet link to current species listings. The USFWS Jackson, Mississippi, office did not respond. The NMFS office in St. Petersburg, Florida, responded via e-mail on April 17, 2009, with a current list of marine species and critical habitat managed by that agency.

In subsequent discussions, the project team deliberated about how to fulfill NPS responsibilities for complying with section 7 of the Endangered Species Act. The outcome of these discussions, based on current procedures and relationships with federal partner agencies, was to include an embedded "biological assessment" in the plan, with associated appendixes as needed for consultation. The National Marine Fisheries Service and both the Florida and Mississippi field offices of the U.S. Fish and Wildlife Service replied with concurrence with the determinations of effect in letters dated March 7, 2012; June 13, 2012; and November 2, 2011, respectively. The letters also included updated species information, which has been incorporated into the plan. (See appendix D of the Final Environmental Impact Statement for all federal and state agency stakeholder letters.)

The Florida Caribbean Migratory Bird Field Office of the U.S. Fish and Wildlife Service provided comments on the draft plan in a letter dated November 18, 2011. The letter provided support for

ongoing efforts to protect migratory birds at Gulf Islands, and also included suggestions on the draft plan. Some of these suggestions have been incorporated into the final plan.

The U.S. Environmental Protection Agency (EPA) provided comments on the draft plan in a letter dated November 7, 2011. The EPA supports the selection of alternative 3 as the preferred alternative and rated the draft environmental impact statement as “Lack of Objection.” The EPA also provided a number of suggestions, some of which were incorporated into the final plan.

## **STATE AGENCIES**

The National Park Service contacted the Florida and Mississippi state historic preservation officers in letters dated November 7, 2003. The letters advised both offices about the start of the planning effort, asked for their involvement in the planning process, and solicited input on issues and concerns to be addressed by the plan. No responses were received at that time. The deputy historic preservation officer for the State of Florida provided comments on the draft plan in a letter dated September 29, 2011. The office concluded that the draft plan adequately addressed cultural resources.

The Mississippi state historic preservation officer provided comments on the draft plan in a letter dated December 6, 2011. The officer concluded that the plan would have no significant adverse impacts on cultural resources and would avoid adverse impacts to cultural resources listed or eligible for listing in the National Register of Historic Places.

The National Park Service contacted the Florida Fish and Wildlife Conservation Commission and the Mississippi Natural Heritage Program in letters dated April 9, 2009. The Florida agency responded with information about the currency of their Internet-based species list. The Mississippi agency responded with information about modifications and potential additions to their state list.

The National Park Service requested a consistency determination for the federal Coastal Zone Management Act. In Florida, this review was coordinated by the Florida Coastal Management Program of the Florida Department of Environmental Protection. In Mississippi, this review was coordinated through the Mississippi Coastal Program through the Mississippi Department of Marine Resources. The National Park Service proposes no development in any area of the national seashore that would conflict with the coastal management program.

The National Park Service met with staff from the Florida Fish and Wildlife Commission and the Department of Environmental Protection on January 25, 2012, and August 15, 2012, regarding Coastal Zone Management Act consistency in the Florida units of the national seashore. The discussions led to a better understanding among the agencies regarding NPS management zoning and other marine management issues. The outcomes of the meetings were a consistency determination dated April 14, 2014, and a decision to develop a memorandum of understanding between the two agencies to guide collaboration during future marine resource planning and management.

The National Park Service received a letter of concurrence dated July 25, 2012, from the Mississippi Department of Marine Resources regarding Coastal Zone Management Act consistency in the Mississippi units of the national seashore.

## AMERICAN INDIAN TRIBES

The National Park Service recognizes that indigenous peoples may have traditional interests and rights in lands now under NPS management. Related American Indian concerns are sought through American Indian consultations. The need for government-to-government Native American Consultation stems from the historic power of Congress to make treaties with American Indian tribes as sovereign nations. Consultations with American Indians and other native groups, such as Native Hawaiians and Alaska Natives, are required by various federal laws, executive orders, regulations, and policies. They are needed, for example, to comply with section 106 of the National Historic Preservation Act of 1966 as amended. Implementing regulations of the Council on Environmental Quality for the National Environmental Policy Act of 1969 (NEPA) also require Native American Consultation.

The National Park Service contacted 26 federally recognized tribes in letters dated April 27, 2004. The NPS letter advised the tribes of the planning process, invited them to participate in planning, and inquired about the tribes' potential interests and concerns as they relate to the planning effort. The tribes that were contacted are listed below. The Chitimacha Tribe of Louisiana responded in a letter dated May 24, 2004. The tribe declined the invitation to participate because the national seashore is outside the tribe's aboriginal homeland. No other tribes responded.

The following tribes were contacted in 2004:

Absentee-Shawnee Tribe of Indians of Oklahoma  
Alabama-Coushatta Tribes of Texas  
Alabama-Quassarte Tribal Town  
Caddo Nation of Oklahoma  
Catawba Indian Nation  
Cherokee Nation  
Chickasaw Nation  
Chitimacha Tribe of Louisiana  
Choctaw Nation of Oklahoma  
Coushatta Tribe of Louisiana  
Eastern Band of Cherokee Indians  
Eastern Shawnee Tribe of Oklahoma  
Jena Band of Choctaw Indians  
Kialegee Tribal Town  
Miccosukee Tribe of Indians  
Mississippi Band of Choctaw Indians  
Muscogee (Creek) Nation  
Poarch Band of Creeks  
Quapaw Tribe of Oklahoma  
Seminole Nation of Oklahoma  
Seminole Tribe of Florida  
Shawnee Tribe  
Thlopthlocco Tribal Town  
Tunica-Biloxi Indian Tribe  
Tuscarora Nation  
United Keetoowah Band of Cherokee Indians

In September 2011, a subset (13) of these tribes was sent a copy of the draft plan for review. This list of 13 tribes was based on updated contact information and relationships with these tribes. No responses were received from any of the following 13 tribes:

Alabama-Quassarte Tribal Town  
Chickasaw Nation  
Choctaw Nation of Oklahoma  
Jena Band of Choctaw Indians  
Kialegee Tribal Town  
Miccosukee Tribe of Indians  
Mississippi Band of Choctaw Indians  
Muscogee (Creek) Nation  
Poarch Band of Creeks  
Seminole Nation of Oklahoma  
Seminole Tribe of Florida  
Thlopthlocco Tribal Town  
Tunica-Biloxi Tribe of Louisiana

# **ATTACHMENT**

## **DETERMINATION OF NONIMPAIRMENT FOR**

### **SEASHORE RESOURCES AND VALUES**

A determination of nonimpairment is made for each of the resource impact topics carried forward and analyzed in the environmental impact statement for the preferred alternative. The description of the national seashore's significance in chapter 1 was used as a basis for determining if a resource is

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

An evaluation for determination of impairment is not required for the impact topics of visitor use and experience, social and economic environment, or NPS operations because impairment findings relate to national seashore resources and values. These impact areas are not generally considered to be resources or values according to the Organic Act and cannot be impaired in the same way that an action can impair resources and values.

## **CULTURAL RESOURCE TOPICS**

### **Historic Structures**

Gulf Islands National Seashore contains forts, artillery batteries, and other important military structures that span the time from the Civil War to World War II. On Perdido Key and Santa Rosa Island in the Florida Unit, there are four 19th century forts that were built to defend Pensacola Bay: Fort Pickens, Fort Barrancas, Fort McRee (which is now submerged), and Advanced Redoubt. Another historically significant fort (Fort Massachusetts) is on Ship Island in the Mississippi Unit. Fort Barrancas, Fort Pickens, and Fort Massachusetts are listed in the National Register of Historic Places. The national seashore has 62 structures on its List of Classified Structures, many of which support the area's significance in preserving coastal fortifications and military defense. Other important historic structures in the national seashore not associated with the military are several Civilian Conservation Corps buildings at Davis Bayou and the Coast Guard Lifesaving Station at Fort Pickens in the Fort Pickens national register boundary.

The preservation of historic structures is key to maintaining the cultural integrity of the national seashore and historic structures are identified in the establishing legislation for the national seashore. The actions in the preferred alternative will result in impacts on historic structures and buildings that will be localized, long term to permanent, and beneficial. Rehabilitation, preservation, and adaptive reuse of historic structures will help to maintain, and in some cases improve, their current condition. Because there will be no adverse effects on historic structures, the preferred alternative will not result in impairment.

## **NATURAL RESOURCE TOPICS**

### **Geologic Processes**

The national seashore encompasses barrier islands and coastal mainland in Florida and Mississippi. Natural barrier island processes of erosion and accretion are well represented in both areas. Many of the areas were formed during the late Pleistocene and Holocene epochs about 11,000 years ago, and sedimentation and subsidence processes continue to this day. Episodic hurricane destruction and island segmentation has played an essential role in the evolution of all the islands in the national seashore. However, human-induced changes to sediment transport, such as dredging around the islands and alterations of the river delta systems north of the national seashore, have altered the natural resilience of the islands to move and recover from severe storms.

Geologic processes are central components of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. The actions in the preferred alternative will have some localized adverse effects on geologic processes, such as the presence of Fort Pickens Road, which disrupts natural barrier island migration and might introduce debris if it is destroyed in future storms. If Johnson Beach Road were not replaced following a severely destructive storm, this will have positive impacts on geologic processes in that area by allowing natural barrier island processes such as dune formation and migration to occur. Other actions in the preferred alternative will support sediment transport, protect sediment processes in seagrass beds, and restore natural flows of water through mainland areas with positive effects on geologic processes. Overall, the actions in the preferred alternative will have beneficial effects on geologic processes in the national seashore and therefore will not result in impairment.

### **Soils**

Soils at Gulf Islands National Seashore are largely maritime in origin. Beaches were deposited by the action of tides, waves, and currents of the Gulf of Mexico. Some soils were deposited and formed by alluvial outwash from river deltas to the north. Soils in the national seashore are generally weathered, with high acidity and low fertility. Soils on the barrier islands and beaches are almost entirely quartz sand with varying amounts of clay, silt, and shell fragments. In locations where plant material has accumulated, such as on sand dunes or near ponds and lagoons, some organic content might develop. Low-lying mainland soils, such as at Davis Bayou, are young soils still forming from accumulation and decomposition of organic material from grasses and marsh vegetation.

Soils are a central component of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. The actions in the preferred alternative will have localized adverse impacts such as soil disturbance during construction of restroom facilities at Perdido Key. Overall, the actions will have negligible or beneficial impacts, such as instituting a camping permit system on some islands, which will lessen visitor impacts on soils, or replacing pavement with more permeable surfaces in some locations, which will reduce erosion. Because the limited adverse impacts on some soils will be highly localized and short in duration, and other impacts will be beneficial and long in duration, the preferred alternative will not result in impairment of soil resources.

### **Water Quality**

More than 80% of the national seashore is submerged land, so water quality is strongly connected to natural resources and visitor enjoyment. The major influence on water quality is land use in the

contributing watersheds, leading to problems such as pollutant loading in stormwater runoff, changes in groundwater recharge rates, and sewage effluent. Water quality is also affected by oil and gas emissions from watercraft, ranging from small personal watercraft to large transport ships. The Loop Current in the Gulf of Mexico brings warm currents northward into the Gulf through the Yucatan Channel and then eastward through the Florida Straits. Thus, water quality and water movement in the national seashore can be influenced by local as well as far-reaching land and water activities. Water quality in the national seashore is considered suitable for recreational purposes and for the maintenance of fish and wildlife populations. Florida waters in the national seashore are not suitable for shellfish harvesting, although the Mississippi waters are suitable for shellfish harvesting. The states of Florida and Mississippi are responsible for water quality monitoring in their respective waters, although the National Park Service is a partner in water quality monitoring and reporting, especially with respect to recreational uses.

High water quality is a central component of the barrier island ecosystem and as such contributes to the natural integrity of the national seashore. Water quality also impacts opportunities for visitors to enjoy the national seashore because most recreational opportunities are water-based or have some connection to the Gulf of Mexico. The actions in the preferred alternative will have overwhelmingly beneficial, long-term impacts on water quality. Some adverse impacts on water quality might occur, such as a possible increase in visitor use, boat traffic, and waste generation on several barrier islands, but these impacts will be highly localized, and visitor education might mitigate some of the impacts. However, many actions in the preferred alternative will have beneficial effects on water quality, such as development of a marine management program, the replacement of pavement with permeable surfaces, filling an abandoned well on West Ship Island and improving sanitation facilities near the Pensacola Naval Air Station sites. Overall, the actions of the preferred alternative will have long-term, beneficial effects on water quality and will not result in impairment.

## **Wetlands**

Much of the vegetation between the ocean and the uplands at Gulf Islands National Seashore is considered tidal marsh, discussed in the “Terrestrial Vegetation and Wildlife” discussion in chapter 3. However, hydric soils and emergent wetland vegetation has become more prevalent following the hurricanes in the past decades. In the Florida District, wetlands became established in the Okaloosa area after Hurricane Opal in 1995. Other wetlands have become established near Fort Pickens following the 2004 and 2005 storms. Davis Bayou and Cat, Horn, and West Ship islands also have natural wetland vegetation.

Wetlands are an important component of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. The actions in the preferred alternative will have beneficial impacts on wetlands such as wetland restoration work on Cat Island. Slight adverse impacts on wetlands might occur if the Fort Pickens Road were rebuilt after a destructive storm, depending on the location of wetland vegetation in relation to storm damage. The National Park Service adheres to a “no net loss” of wetlands policy and abides by other federal and agency wetlands policies. A “statement of findings” will be prepared should the implementation of any component of this general management plan result in adverse impacts on wetlands. Further environmental compliance and permitting is expected during project implementation per National Park Service and U.S. Army Corps of Engineers requirements. Because of the largely beneficial effects and only slight, localized, potential adverse effects on wetlands, the preferred alternative will not result in impairment of wetlands in the national seashore.

## **Terrestrial Vegetation and Wildlife**

Gulf Islands National Seashore contains a great diversity of terrestrial vegetation among the barrier islands and mainland ecosystems. Tidal salt marshes, lagoons, shrub and thicket, swamps, dunes, maritime and hardwood forest, pine woods, and beaches all support vegetation that ranges from salt-tolerant grasses to live oak trees. Other dominant terrestrial plants include longleaf pine, smooth cordgrass, bulrushes, sedges, and sea oats. In general, the salinity level and inundation of the soil dictates what species can inhabit a specific site. Because of the dynamic nature of the coastal and barrier island environments, terrestrial vegetation on the islands and along the water's edge can vary dramatically from year to year depending on storm cycles and flooding and drying periods.

Wildlife in the terrestrial environment includes numerous shorebirds, amphibians, and reptiles. A variety of terns, clapper rails, osprey, bald eagles, and herons are among the common birds found in the national seashore. Seasonal closures are instituted in some areas to protect the nests of these birds from human disturbance. Common amphibians and reptiles include the eastern glass lizard, five-lined skink, and alligator snapping turtle.

Terrestrial vegetation and wildlife are important components of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. In addition, they provide benefits for visitor enjoyment of the national seashore. The primary adverse impacts of the preferred alternative will be limited to short-term disturbance of habitat in several locations, such as the burying of utility lines at Naval Live Oaks. However, most impacts on wildlife and terrestrial vegetation will be long term and beneficial, such as instituting a camping permit system for some of the barrier islands that will permit better visitor education and visitor use management. Because there will only be slight, localized, adverse impacts and long-term beneficial impacts, the preferred alternative will not result in impairment of terrestrial vegetation and wildlife.

## **Aquatic Vegetation and Wildlife**

The national seashore contains large expanses of seagrasses, which thrive in areas up to 12 feet deep that have sandy bottoms and calm waters. These seagrass communities form the basis of the food web in the marine ecosystem and provide cover and nursery habitat for many species. Although the seagrasses make up a small percentage of the total submerged lands around the national seashore, they support a disproportionately large diversity of species. Seagrass beds are susceptible to degradation from propeller scarring, dredging activities, pollution and nutrient loading, boat traffic, and shoreline modification. Natural events such as storms, changes in salinity, and sediment transport also affect seagrass bed ecosystems.

Aquatic species in the national seashore inhabit both estuarine and marine habitats. More than 200 species of fish are found in the national seashore, including killifish, sailfin molly, and mosquito fish. These predators rely on the most abundant fishes, anchovies and silversides as a food source. Other important species include channel bass, speckled sea trout, flounder, snapper, tarpon, and mullet. Several species of sharks and rays are found in the national seashore, as are many shellfish including blue crabs, shrimp, and stone crabs.

Aquatic plants and wildlife are central components of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. The preferred alternative will result in adverse impacts on these resources in areas where boat traffic and human activity might increase such as ferries near Davis Bayou or increased boat access to Cat Island. However, the institution of a seagrass bed protection zone in many areas of the national seashore will provide substantial long-

term beneficial impacts on seagrasses, other aquatic plant species, and the wildlife species that inhabit these ecosystems. Additionally, the development of a marine management program under this alternative will provide better information for management of aquatic plants and wildlife. Overall, adverse impacts will be slight and localized and beneficial impacts will be widespread and long term. The preferred alternative will therefore not result in impairment of aquatic plants and wildlife.

## **Special Status Species**

The Endangered Species Act requires federal agencies to ensure that their activities will not jeopardize the existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. As a matter of policy, the National Park Service also supports the conservation of the populations and habitats of state listed species of concern. Consultation with the U.S. Fish and Wildlife Service; the National Marine Fisheries Service; the Florida Fish and Wildlife Conservation Commission; and the Mississippi Department of Fish, Wildlife, and Parks identified a number of threatened, endangered, or species of concern in the national seashore. Federally listed species in the national seashore include the Perdido Key beach mouse, West Indian manatee, American alligator, four species of sea turtle, Eastern indigo snake, gopher tortoise, wood stork, and Mississippi sandhill crane. State species of special concern include the saltmarsh topminnow, Gulf salt marsh snake, Stoddard's yellow-throated warbler, Bachman's sparrow, peregrine falcon, least tern, Santa Rosa beach mouse, and Cruise's golden aster.

Viable populations of species of concern, including both federal and state listed species, are central components of the barrier island ecosystem and as such contribute to the natural integrity of the national seashore. The actions in the preferred alternative will have slight adverse impacts on several listed species. For example, increased human use in the Naval Live Oaks area might impact the gopher tortoise, and increased activity near Johnson Beach might impact the Perdido Key beach mouse. In other locations, long-term beneficial impacts to species of concern will be expected because of the regulation of camping and continuation of bird nesting closures. In all cases, the National Park Service will continue working with the federal and state agencies responsible for listing these species to develop mitigation measures for population and habitat protection. Because of the localized nature of the adverse impacts, widespread beneficial impacts, and continued consultation with cooperating agencies, the preferred alternative will not result in impairment of special status species.

## **SUMMARY**

As described above, adverse impacts anticipated as a result of implementing the preferred alternative on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation of the national seashore, key to the natural or cultural integrity of the national seashore or to opportunities for enjoyment of the national seashore, or identified as significant in the national seashore's general management plan or other relevant NPS planning documents will not rise to levels that will constitute impairment.