NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR

Foundation Document

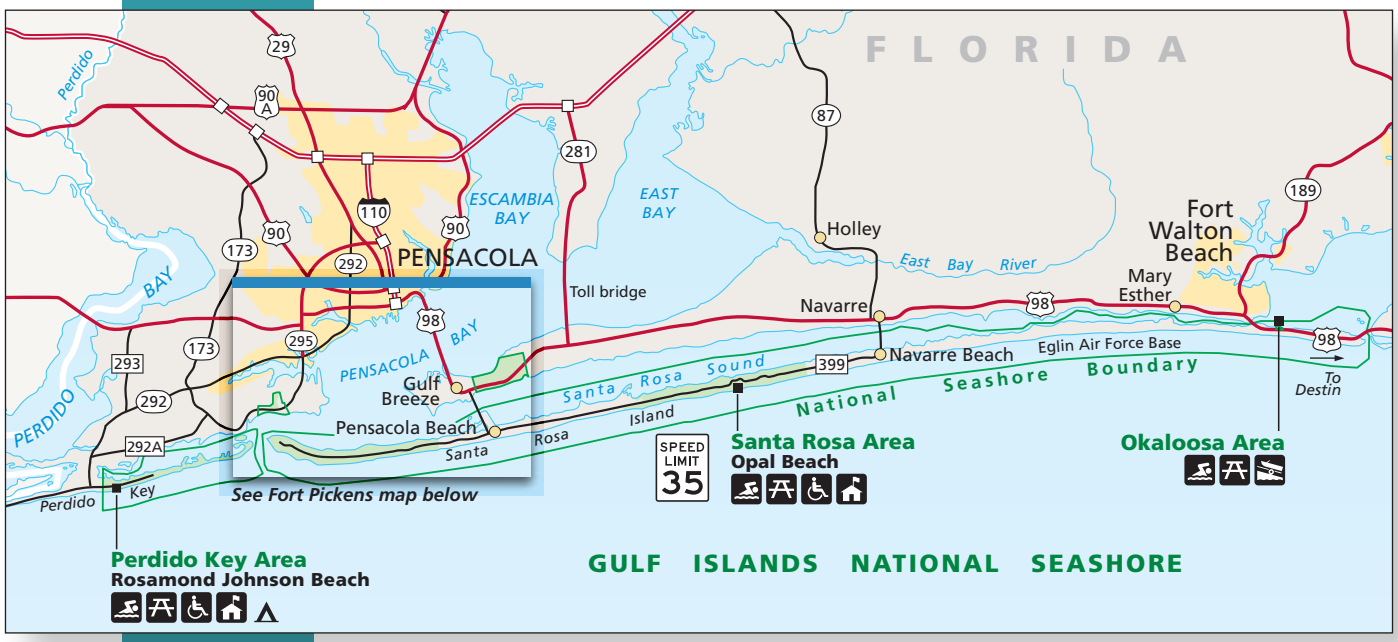
Gulf Islands National Seashore

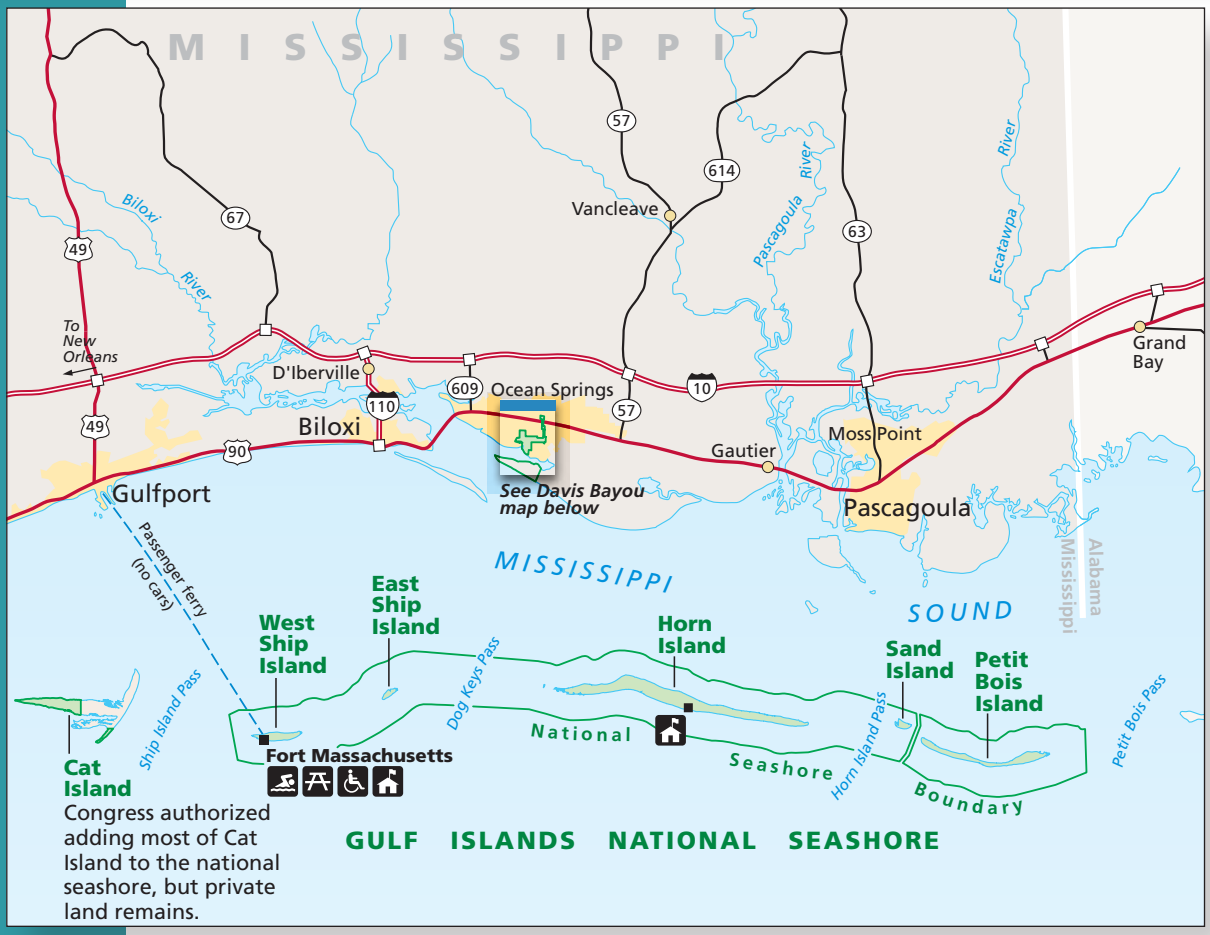
Florida/Mississippi

July 2016



Signatures 7-8-2016


FLORIDA
Perdido
BAY
29
90
A
281
87
ESCAMBIA BAY
EAST BAY
110
90
PENSACOLA
Holley
East Bay River
Fort Walton Beach
189
173
292
Toll bridge
Navarre
98
Mary Esther
295
PENSACOLA BAY
Gulf Breeze
Navarre Beach
Eglin Air Force Base
293
173
399
98
PERDIDO
292
Santa Rosa Sound
National Seashore Boundary
To Destin
Pensacola Beach
Santa Rosa Island
292A
SPEED LIMIT 35
Santa Rosa Area
Opal Beach
Okaloosa Area
Perdido Key
See Fort Pickens map below
Perdido Key Area
Rosamond Johnson Beach
GULF ISLANDS NATIONAL SEASHORE


MISSISSIPPI
57
614
Biloxi River
Vancleave
Pascagoula River
Escatawpa River
67
63
49
To New Orleans
D'Iberville
609
Ocean Springs
10
Grand Bay
110
Biloxi
57
49
90
Gautier
Moss Point
See Davis Bayou map below
Gulfport
Pascagoula
Passenger ferry (no cars)
MISSISSIPPI SOUND
Alabama
Mississippi
West Ship Island
East Ship Island
Horn Island
Sand Island
Petit Bois Island
Dog Keys Pass
Ship Island Pass
National Seashore Boundary
Horn Island Pass
Petit Bois Pass
Cat Island
Fort Massachusetts
Congress authorized adding most of Cat Island to the national seashore, but private land remains.
GULF ISLANDS NATIONAL SEASHORE

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Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship**: We share a commitment to resource stewardship with the global preservation community.
- **Excellence**: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- **Integrity**: We deal honestly and fairly with the public and one another.
- **Tradition**: We are proud of it; we learn from it; we are not bound by it.
- **Respect**: We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park's purpose, significance, fundamental resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Gulf Islands National Seashore can be accessed online at: http://insideparkatlas.nps.gov/.



Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Park

Gulf Islands National Seashore was established by the U.S. Congress on January 8, 1971. The national seashore encompasses barrier islands, coastal mainlands, and surrounding waters in Mississippi and Florida and extends for 160 miles from Cat Island in Mississippi to the eastern end of Santa Rosa Island in the northwest section of Florida's panhandle. The national seashore was set aside for the purpose of preserving areas possessing outstanding natural, historic, and recreational values for public use and enjoyment. The current authorized acreage of the national seashore is 139,175 acres. From 2011 to 2014, annual average visitation was almost 5 million visitors.

The resources of the seashore range from remote wilderness islands with few visitors to publicly accessible white sand beaches and historic sites visited by several million people each year. It also includes bayous, salt marshes, live oaks, maritime forests, and 120,000 acres of marine habitat. The natural environment provides support for complex plant and animal communities, both terrestrial and aquatic, that characterize the northern Gulf Coast. More than 80% of Gulf Islands National Seashore is marine habitat and open water. Hurricanes, tropical storms, sea level rise, climate change, and natural sand transport caused by current and winds are important drivers of change at the national seashore. Both Horn and Petit Bois Islands in Mississippi are federally designated wilderness areas.

Gulf Islands National Seashore contains a number of 19th century forts built as part of the "Third System" of national defense. Construction of Fort Pickens, the largest, was initiated in 1829 and completed in 1834. Two forts on the mainland, Fort Barrancas and Advanced Redoubt, are on Naval Air Station Pensacola. Fort Barrancas includes the 18th century Spanish Bateria de San Antonio, a national historic landmark. Other Third System forts include Fort McRee in Florida, which is now an archeological site, and Fort Massachusetts in Mississippi on the northwestern shore of West Ship Island. These forts were built as part of a fortification effort to protect all major U.S.harbors after the War of 1812. Many of the extant cultural resources on Santa Rosa Island were part of the 13th Coast Artillery Regiment of the U.S. Army Coast Artillery Corps. In addition to the coastal defense forts, numerous artillery batteries can be found that span the time from the Civil War to the end of World War II.



Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Gulf Islands National Seashore was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The national seashore was established when the enabling legislation adopted by Congress was signed into law on January 8, 1971 (see appendix A for enabling legislation and subsequent amendments). The purpose statement lays the foundation for understanding what is most important about the national seashore.

Gulf Islands National Seashore preserves and interprets an interconnected system of coastal defense fortifications, barrier islands, wilderness, and coastal and marine ecosystems in Mississippi and northwest Florida, while providing for public use and enjoyment.



Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Gulf Islands National Seashore, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Gulf Islands National Seashore. (Please note that the sequence of the statements does not reflect the level of significance.)

1. Gulf Islands National Seashore possesses dynamic beach ecosystems, a diversity of wildlife, and scenic character that are publicly accessible and provide a striking contrast to the surrounding urban development of the northern Gulf Coast.

2. Gulf Islands National Seashore exhibits the natural biologic and geologic processes of the dynamic and rapidly changing barrier islands, which are interconnected along 160 miles of the northern Gulf Coast.

3. Horn and Petit Bois Islands, the only nationally designated barrier island wilderness areas on the Gulf Coast protected by the National Park Service, provide opportunities for solitude and unconfined recreation.

4. Gulf Islands National Seashore contains one of the most complete collections of forts and structures relating to the evolution of seacoast defense in the United States. Publicly accessible sites represent a continuum of development from the Spanish colonization of the 18th century through World War II.

5. Gulf Islands National Seashore contains more than 120,000 acres of submerged land and open water, protects marine processes and ecosystems, and provides opportunities for water-based recreation.



Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Gulf Islands National Seashore:

- **Terrestrial and Marine Ecosystems.** Terrestrial and marine ecosystems in Gulf Islands National Seashore are extremely diverse. More than 80% of the national seashore is marine or open-water habitat, including seagrass beds, tidal salt marshes, bayous, and deeper open-water areas. The seashore supports habitat for more than 400 fish species and provides essential fish habitat and important nursery habitat. Terrestrial habitats include newly formed and relict sand dunes, live oak forests, wet pine flatwoods, and maritime forests. More than a dozen federally listed threatened and endangered species are present in the national seashore. Wildlife species of special concern include four sea turtles, the Gulf sturgeon, the eastern indigo snake, the piping plover, the red knot, the Perdido Key beach mouse, and the West Indian manatee. State-listed species include the diamondback terrapin in Mississippi and the snowy plover and least tern in Florida.





- **Coastal Fortifications.** The coastal fortifications in Gulf Islands National Seashore represent a continuum of seacoast defense systems that span almost 150 years from the Spanish colonial era through World War II. Fort Pickens, Fort Barrancas, Advanced Redoubt, Fort McRee, Fort Massachusetts, 13 concrete gun batteries and numerous barracks, support structures, and ruins at Fort McRee and Fort Pickens illustrate the evolution of harbor defenses in response to changes in weapons technology. The national seashore also maintains collections of artifacts, documents, and archives associated with the fortifications' architecture, weaponry, and histories.

- **Barrier Islands.** The barrier islands of the national seashore extend for 160 miles along the northern Gulf Coast and include Santa Rosa Island and Perdido Key in Florida and Petit Bois, West Petit Bois, Horn, East and West Ship, and Cat Islands in Mississippi. The natural processes of waves, sand deposition, storms, and currents are still evident in the migration of these islands. The islands support a range of visitor opportunities and amenities from isolated backcountry locations to popular traditional beach activities.

- **Visitor Opportunities.** Gulf Islands National Seashore supports a wide variety of recreational, educational, and scenic opportunities for visitor enjoyment, including both land-based and water-based activities. Opportunities include water sports, visiting historic sites, wildlife viewing, boating, hunting and fishing, and traditional recreational activities on pristine white sand beaches. The seashore invites visitors to enjoy themselves on isolated wilderness islands or popular white sand beaches near Pensacola and Navarre.

- **Gulf Islands Wilderness.** The Gulf Islands Wilderness was established as a component of the National Wilderness Preservation System by the National Parks and Recreation Act of 1978, Public Law (PL) 95-625, on November 10, 1978. This legislation designated approximately 1,800 acres of the seashore as wilderness and an additional 2,800 acres as potential wilderness, for a total of approximately 4,600 acres. The Gulf Islands Wilderness consists of lands on Horn and Petit Bois Islands off the coast of Mississippi; it is the only designated wilderness area on the Gulf Coast protected by the National Park Service. The wilderness boundary includes all of Petit Bois Island and most of Horn Island. Scenic views, night skies, and natural sounds are important components of the wilderness character.

Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Gulf Islands National Seashore:

- **Sand, Sea, Salt Marsh, and Maritime Forest.** The unique terrestrial and marine ecosystems within Gulf Islands National Seashore that provide important habitat for a diversity of life including threatened and endangered species motivates preservation and protection by the National Park Service, partners, and citizen stewards. More than 80% of the national seashore is marine or open-water habitat, including seagrass beds, tidal salt marsh, bayous, and deeper open-water areas, that provides essential fish and nursery habitats. Terrestrial habitats include newly formed and relict sand dunes, live oak forests, wet pine flatwoods, and maritime forests.
- **Forts and Fire Power.** The coastal fortifications within Gulf Islands National Seashore represent a continuum of seacoast defense systems that span almost 150 years from the Spanish colonial period through World War II. Coastal ports along area harbors and river mouths were the gateways to the outside world as well as targets for an enemy. Forts Pickens, Barrancas, Advanced Redoubt, McRee, and Massachusetts illustrate the evolution of harbor defenses in response to changes in weapons technology and stand today as monuments to America's early homeland defense system.



- **Barrier Islands.** The barrier islands of the national seashore extend for 160 miles east to west, from Florida's Santa Rosa Island in the east to Mississippi's Cat Island in the west. Barrier islands, salt marshes, and marine areas are continually reshaped by the dynamic and rapidly changing environment of the northern Gulf Coast. The natural processes of waves, sand erosion and deposition, storms, and currents are evident in the migration of these islands. Human activities such as dredging of shipping and navigational channels, beach replenishment, and changes in the amount of sediment moving within the Mississippi Sound and Gulf of Mexico waters cause significant effects on the natural barrier island processes.
- **Visitor Enjoyment.** Scenic beaches, dynamic bayous, and cultural treasures provide opportunities for the 21st century visitor to experience adventure, relaxation, reflection, and learning and to create memories, including participation in citizen science, thus fostering a community of engaged and active national seashore stewards. Activities include water sports, visiting historic sites, wildlife viewing, boating, hunting and fishing, and traditional recreational activities on pristine white sand beaches. The seashore offers popular gathering sites at forts and beaches.
- **Wilderness Islands.** Gulf Islands National Seashore includes the only federally designated wilderness area on the Gulf Coast protected by the National Park Service—Horn and Petit Bois Islands in Mississippi. These wilderness islands provide sanctuaries for flora and fauna, as well as opportunities for visitors to experience secluded public recreation, physical challenges, inspiration, reflection, and solitude. Access to these islands provides visitors with unique opportunities to experience night skies, natural sounds, and primitive viewsheds and reconnect with the outdoors.
- **Location and Legacy.** Fort Pickens and Fort Barrancas are monuments to the skill and toil of slave masons, carpenters, and laborers who built these forts to protect and ensure the liberty of the United States, even as they were denied that individual liberty. These historic masonry forts stand today as monuments to challenges of all those who constructed, manned, and fought within their brick confines.



Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Gulf Islands National Seashore.

Special Mandates

- **National Seashore Legislative Boundary (16 USC 459H[b]).** Gulf Islands National Seashore is composed of a series of barrier islands, mainland, and waters along the northern Gulf Coast in both Mississippi and Florida. In general, the boundary of the offshore islands in Florida extends on the north to the south boundary of the Intracoastal Waterway and on the south outward to 1 mile beyond the low tide line of the islands. The boundary in Florida encircles the westernmost 7 miles of Perdido Key and encircles all 48 miles of Santa Rosa Island, exclusive of Pensacola Pass. The boundary in Mississippi extends 1 mile north and south beyond the low tide line of the offshore islands, with the exception of Cat Island. The boundary in Mississippi is contiguous from the old Gulfport shipping channel to the Alabama state line, exclusive of the Pascagoula shipping channel. The Intracoastal Waterway and the ship channels are excluded from the national seashore. All submerged lands within the legislative boundary in Mississippi are owned by the U.S. government and administered by the national seashore. Some of the submerged lands within the legislative boundary in Florida have been "dedicated and conveyed" to the U.S. government, including those adjacent to Fort Pickens, Santa Rosa, and Naval Live Oaks areas. The remainder of the submerged lands within the boundary in Florida is owned by the state. The National Park Service administers the waters within the legislative boundary regardless of the ownership of submerged lands, including the water surface and water column.

- **Land Acquisition**

  - **(PL 106-554).** Within the boundaries of the national seashore, lands, waters, and interests therein may be acquired by donation, purchase with donated or appropriated funds, or exchange, except that property owned by a state or any political subdivision, thereof, may be acquired only with the consent of the owners. Submerged lands (1-mile buffer zone surrounding lands of Cat Island) can only be acquired by donation from the state of Mississippi.

  - **(PL 95-625).** Gulf Islands National Seashore was authorized to acquire 600 acres along Marsh Point in Mississippi; actual acreage is 511 acres. Acquisition of this land has not taken place, but the lands would be managed under the national seashore's general management plan should a willing seller and funding become available.

- **Pensacola Naval Air Station (PL 91-660).** The Pensacola Naval Air Station regulates public access to Bateria de San Antonio (Water Battery), Fort Barrancas, the Advanced Redoubt, and the visitor center located within their boundaries. Public access may be restricted during heightened national security level changes.

  Approximately 14 miles of the easternmost part of Santa Rosa Island is owned by the U.S. government and administered by Eglin Air Force Base. By legislation, those lands will be transferred to the administrative jurisdiction of the national seashore should they ever be deemed excess by the military.

- **Wilderness Management (PL 95-625 and Wilderness Act of 1964).** In accordance with the requirements of the Wilderness Act, facilities will not be provided on Horn and Petit Bois Islands for the convenience of visitors because those islands will be managed to maintain their primeval character. There is a small administrative enclave on Horn Island for the purposes of maintaining a dock and ranger station. These facilities are being evaluated for removal, and these seven acres would be managed as potential wilderness. Essential administrative activities in wilderness will be carried out without the use of mechanized equipment in accordance with the Wilderness Act of 1964.

- **Navigation and Maritime Safety (PL 91-660 and 95-625).** The establishment of the national seashore shall not abridge the authority of the U.S. Army Corps of Engineers, with respect to navigation or related matters, except that beach erosion control and hurricane protection and spoil deposit activities shall be carried out by the U.S. Army Corps of Engineers in accordance with a plan that is acceptable to the Department of the Interior. Public Law 95-625 allows the U.S. Coast Guard and the Federal Aviation Administration to use the designated wilderness areas for navigational and maritime safety purposes.

- **Hunting and Fishing (PL 91-660).** Hunting and fishing shall be permitted on lands and waters within the national seashore in accordance with applicable federal and state laws, except where or when prohibited by the Secretary of the Interior for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment.

- **Fort Pickens Aquatic Preserve (18-20 Florida Administrative Code).** The Fort Pickens Aquatic Preserve surrounds the western end of Santa Rosa Island and the eastern end of Perdido Key. Management of the preserve will be a joint effort between the Florida Department of Environmental Protection and the National Park Service.

- **Outstanding Florida Waters (State of Florida designation).** The Florida Department of Environmental Protection designated waters within Gulf Islands National Seashore as "Outstanding Florida Waters." This designation grants special protection to Florida waters based on their natural attributes.

- **Rights-of-Way and Easements**

  - **(PL 106-554).** The national seashore's enabling legislation was amended to include a provision to allow an easement over approximately 150 acres of land on Cat Island known as the Boddie Family Tract. This easement has yet to be negotiated.

  - **(PL 91-660).** Existing gas and oil transmission easements and rights-of-way through the national seashore (when oil and gas are removed from outside the boundaries) shall not be diminished, and the Secretary of the Interior may permit additional rights-of-way or easements.

Administrative Commitments

- **Local Utility Agreements and Easements (not all-inclusive).** The national seashore has a right-of-way agreement with the City of Gulf Breeze to allow construction and maintenance of a storm drain and waterline along the northwestern boundary of the Naval Live Oaks Area. A right-of-way through the national seashore may be needed to allow the City of Gulf Breeze to maintain a new waterline along U.S. Highway 98.

  The Florida Department of Transportation was granted a 160-foot-wide perpetual easement to operate, maintain, and repair that section of U.S. Highway 98 that crosses the Naval Live Oaks Area. The easement includes the right to issue and renew public utility permits within the right-of-way.

  Gulf Power Company has rights-of-way to operate and maintain an underground electrical line and facilities in the Naval Live Oaks Area and for an electrical distribution system within the Fort Pickens Area.

  The City of Ocean Springs, Mississippi, has a right-of-way to operate and maintain existing water and sewer systems within the Davis Bayou Area.

- **Law Enforcement.** Jurisdiction over law enforcement matters is mixed. In Florida, all units, with the exception of the Pensacola Naval Air Station Historic District, are under concurrent jurisdiction, in that both the federal government and the state have the power to deal with all degrees of crimes. Exclusive federal jurisdiction has been retained for the Pensacola Naval Air Station Historic District because the surrounding Naval Air Station lands are held under the same federal jurisdiction.

  In Mississippi, all lands and waters of the national seashore are under concurrent jurisdiction except for inholdings and recently acquired lands, which are under proprietary jurisdiction. NPS law enforcement actions include enforcement of federal and state criminal laws, traffic statues, and NPS regulations aimed at protecting resources and visitor experience from inappropriate activities.

  Where submerged lands are owned by the State of Florida, the National Park Service still has regulatory authority to apply NPS regulations to activities occurring on the water surface, in the water column, and on shore below the mean high water line within the seashore's boundary.

  - Memorandums of Agreement. Memorandums of agreement with a number of local law enforcement agencies provide the opportunity to work in harmony for the common purpose of better protecting life and property of the public they serve by cooperating in the use of trained personnel and equipment where unforeseen threats to human life and property within the respective jurisdictions arise. These groups include the following:

    Florida

    - City of Gulf Breeze Police Department
    - Escambia County Sheriff's Department
    - Okaloosa County Sheriff's Department
    - Santa Rosa County Sheriff's Department

    Mississippi

    - Ocean Springs Police Department

  - Memorandums of Understanding. The national seashore has memorandums of understanding with the Jackson County and Harrison County, Mississippi, sheriff's offices for purposes of assisting in the enforcement of federal laws and regulations on the lands and waters of Gulf Islands National Seashore within the state of Mississippi.

- **Fire Protection and Emergency Medical Services**
  - Memorandums of Understanding. Memorandums of understanding with a number of local fire departments allow the assistance of structural fire prevention and suppression and the protection of life and property from fire on lands administered by the national seashore. These groups include the following:
    - Gulf Breeze Volunteer Fire Department, Florida
    - Escambia County Fire and Rescue, Florida
    - Pensacola Naval Air Station, Florida
    - Okaloosa Island Fire District, Florida
    - Ocean Springs Fire Department, Mississippi
  - Memorandum of Understanding. A memorandum of understanding with Big Lagoon State Park provides for personal services and equipment required for prevention and suppression of wildland fires and the protection of life and property from these fires in the Perdido Key Area administered by Gulf Islands National Seashore and Big Lagoon State Park administered by the State of Florida.
  - Cooperative Agreement. A cooperative agreement with the Florida Department of Agriculture and Consumer Services allows for conducting fire management activities and preliminary fire-related investigations.
- **Commercial Services (16 USC 1, 2-4 and PL 105-391).** Commercial services are provided at Gulf Islands National Seashore by way of concessions contracts and commercial use authorizations.

Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

1. analysis of fundamental resources and values
2. identification of key issues and associated planning and data needs
3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.



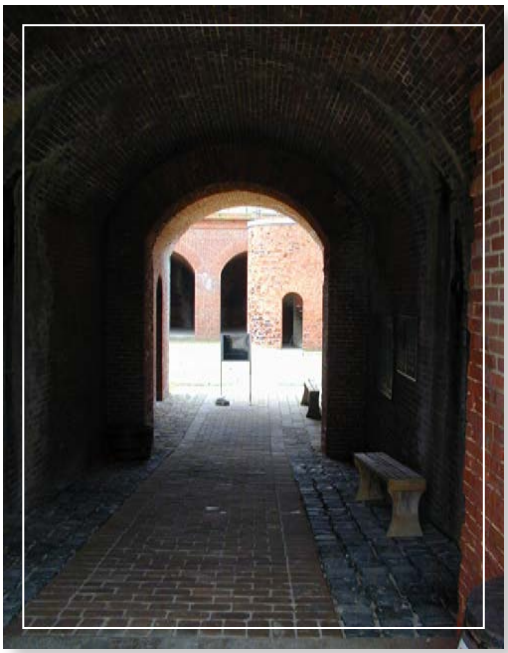
Fundamental Resource or Value	Terrestrial and Marine Ecosystems
Related Significance Statements	Significance statements 1, 2, 3, and 5.
Current Conditions and Trends	**Conditions** • In Pensacola Bay, 90% of seagrass has disappeared since the 1960s due to water quality degradation. • Davis Bayou and Naval Live Oaks forest communities are transitioning from historic fire-dependent ecosystems due to the infrequency of naturally occurring and prescribed burns. • Listed threatened and endangered species in habitats protected by the national seashore include mice, sea turtles, invertebrates, and shorebirds. • Gulf sturgeon is a federally listed threatened species. Recent radio-tracking studies demonstrate the importance of barrier islands to the life cycle and recovery of this species. • The national seashore has two exotic plant management teams that collect data related to invasive species. • The Gulf Coast Network of the NPS Inventory and Monitoring Program conducts regular assessments of water quality, seagrasses, and land birds and is developing protocols to monitor terrestrial vegetation, shoreline position, and island topography. **Trends** • Seagrass coverage is declining in Mississippi and Florida. • Shorebird nesting is declining overall. • In the Davis Bayou area pitcher plants are declining due to excessive overstory vegetation. Prescribed burns could improve habitat conditions for pitcher plants. • In Florida, sea turtle populations are stable, but active management is needed due to excessive human-caused (anthropogenic) light sources.

Fundamental Resource or Value	Terrestrial and Marine Ecosystems
Threats and Opportunities	**Threats** • Invasive species (plant and animal) are an issue and include tawny crazy ants, torpedo grass, cogon grass, Cuban bull rush, lion fish, nutria, and popcorn trees (Chinese tallow trees). • The use of prescribed burns is difficult due to the proximity of urban development. • There have been issues with harassing and/or taking of species including pelicans, sea turtles, alligator snapping turtles, and dolphins. • High visitation and organized educational groups affect national seashore resources. • Although a pack it in, pack it out policy has been implemented for trash management, trash and debris continue to impact wildlife. • The presence of asphalt on beaches (at Fort Pickens Road in particular) can impede natural dune formation. • Marine debris washing onto barrier islands includes beach trash from visitors, industrial trash from drill platforms and commercial boats and ships, and larger debris, such as buoys, from the Gulf of Mexico. • Vegetated dune systems and their inhabitants are impacted by high visitation. • Some fishermen have caught bait fish inside national seashore boundaries for commercial sales; this resource extraction impacts resources. • Predators threaten the productivity of shorebirds nesting at the seashore. • Vehicles cause some mortality of nesting shorebirds and chicks on roadways. • Sea level rise has increased and is projected to increase an additional 1.82–2.32 feet by 2100. Climate change may also cause increases in mean annual temperature, frequency of intense storm events, and extreme heat events (>95 °F). These changes threaten terrestrial and marine ecosystems through loss of land, increased erosion, rising groundwater tables and possible salt water intrusion, loss of nearby freshwater ecosystems, and an increase in nonnative plants and shift in ranges of native vegetation northward. • Anthropogenic light can affect the ecosystems at the national seashore. **Opportunities** • Provide for better coexistence between human and nonhuman users of the beaches. • Increase discussions with local and state agencies and enhance partnerships related to management of water within the national seashore boundary. • Increase education of public and local agencies about management of water within the national seashore. • Develop curriculum-based education programming to include impacts of trash by working with state, local communities, oil and gas developers, and the shrimping industry. This trash includes both that on the beaches from visitors as well as large beach debris washing up from Gulf of Mexico. • Pursue experimental fire management practices. • Continue to implement speed control measures on roads in the national seashore.
Data and/or GIS Needs	• Visitor services study. • Study of effectiveness of visitor management efforts.
Planning Needs	• Marine resources management plan. • Invasive species management plan. • Resource stewardship strategy. • Visitor use management plan. • Motorized vessel use plan. • Fisheries management plan.

Fundamental Resource or Value	Terrestrial and Marine Ecosystems
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Bald and Golden Eagle Protection Act; 16 USC 668 • Clean Water Act; 33 USC 1251-1387, 33 USC 1151 • Clean Air Act; 42 USC 7401 et seq. • Endangered Species Act of 1973, as amended; 16 USC 1531 et seq. • Federal Noxious Weed Act of 1974, as amended; 7 USC 2801 et seq. • Migratory Bird Treaty Act; 16 USC 703-712 • National Invasive Species Act; 16 USC 4701 • National Environmental Policy Act of 1970; 42 USC 4321 • Wilderness Act (1964); 16 USC 1131 et seq. • Executive Order 13112, "Invasive Species" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS *Management Policies 2006* (§4.1) "General Management Concepts" • NPS *Management Policies 2006* (§4.1.4) "Partnerships" • NPS *Management Policies 2006* (§4.4.1) "General Principles for Managing Biological Resources" • NPS *Management Policies 2006* (§4.6.2) "Water Rights" • NPS *Management Policies 2006* (§4.6.4) "Floodplains" • NPS *Management Policies 2006* (§4.8.1.1) "Shorelines and Barrier Islands" • NPS *Management Policies 2006* (§4.10) "Lightscape Management" • NPS *Management Policies 2006* (§4.7) "Air Resource Management" • NPS *Management Policies 2006* (§4.7.2) "Weather and Climate" • Director's Order 18: *Wildland Fire Management* • Director's Order 77-2: *Floodplain Management* • NPS Reference Manual 18: *Wildland Fire Management* • NPS *Natural Resource Management Reference Manual 77* • NPS Procedural Manual 77-1: *Wetland Protection* • NPS Procedural Manual 77-2: *Floodplain Management*









Fundamental Resource or Value	Coastal Fortifications
Related Significance Statements	Significance statement 4.
Current Conditions and Trends	**Conditions** • All coastal fortification sites require ongoing maintenance and repair. When the national seashore was created in the 1970s, much work was done, but more remains to be completed. • Fort Pickens, Fort Massachusetts, and Fort Barrancas have high visitation levels. • Officers' quarters are used as park housing, and rent is used to help maintain structures. • There are a range of conditions for coastal fortifications—some are in fair condition and others are in poor condition, but all are in need of maintenance and repair. **Trends** • Due to insufficient level of maintenance, the condition of coastal fortifications is continually deteriorating.
Threats and Opportunities	**Threats** • Rainfall, periodic catastrophic storms, and a continuous growing season all affect the integrity of historic structures. • Vandalism, including graffiti, has been an issue at certain coastal fortification sites. • Unsealed concrete at gun batteries creates issues with rusting and concrete blowouts. • Certain fortifications in especially bad condition have been managed by benign neglect (e.g., Battery Cullum-Sevier). • Sea level rise may inundate many coastal fortification sites. This is especially a problem at Fort Massachusetts and Fort McRee. • Metal structures, armaments, and visitor facilities are continually affected by salt corrosion. **Opportunities** • Adaptively reuse some structures; regular use of the sites helps with general maintenance. • Enhance interpretation of the coastal fortifications based on new historical research (e.g., waysides).

Fundamental Resource or Value	Coastal Fortifications
Data and/or GIS Needs	• Historic resource study. • Administrative history. • Cultural landscape inventories. • Historic American Buildings Survey / Historic American Engineering Record documentation. • National Register of Historic Places nominations.
Planning Needs	• Historic structure reports. • Cultural landscape reports. • Resource stewardship strategy.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Antiquities Act of 1906; 54 USC 320301-320303, 34 Stat. 225 • Archeological and Historic Preservation Act of 1974; 54 USC 312502 et seq. • Archaeological Resources Protection Act of 1979; 54 USC 302902 • Historic Sites Act of 1935; 54 USC 320101 et seq. • Museum Properties Management Act of 1955; 54 USC 102501-102504 • National Historic Preservation Act of 1966, as amended; 54 USC 300101 et seq. • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" • "Curation of Federally-Owned and Administered Archaeological Collections," 36 CFR 79 • "Protection of Historic Properties," 36 CFR 800 **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (chapter 5) "Cultural Resource Management" • Director's Order 24: *NPS Museum Collections Management* • Director's Order 28: *Cultural Resource Management (1998)* • Director's Order 28A: *Archeology (2004)* • NPS *Museum Handbook,* parts I, II, and III • *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*





Fundamental Resource or Value	Barrier Islands
Related Significance Statements	Significance statements 1, 2, 3, and 5.
Current Conditions and Trends	**Conditions** • The natural accretion and erosion processes that maintain the barrier islands have been disrupted by storm events, sea level rise, dredging, and beach renourishment. • The east and west transport of marine sediment has been reduced by dredging to maintain navigation channels. • The sediment supply that supports the barrier islands will be augmented by 19 million cubic yards of compatible sand that will reconnect East and West Ship Islands. • Recurring dredge placement and renourishment is taking place at Perdido Key as a result of the dredging maintenance of Pensacola Pass. • Fort Massachusetts and the north shore of West Ship Island was last renourished in 2011–2012. • The U.S. Army Corps of Engineers has proposed widening the Pascagoula shipping channel and the Gulfport shipping channel west of West Ship Island (outside the seashore boundary). **Trends** • The barrier islands are eroding at different rates; East Ship and Petit Bois Islands are eroding faster than the other islands due to dredging and other human activities. • The canopy is declining on the barrier islands; storms kill off pine trees, which affects wildlife habitat. • High levels of visitation result in impacts to dunes and dune vegetation. • There is regularly occurring beach renourishment at non-NPS beaches such as at Navarre Beach and Pensacola Beach. The impacts on NPS beaches from sand placement and transport due to these projects need to be further studied.

Fundamental Resource or Value	Barrier Islands
Threats and Opportunities	**Threats** • Human activities such as dredging operations in several shipping and navigational channels, beach renourishment, and changes in the amount of sediment moving within the Mississippi Sound and Gulf of Mexico waters have significantly affected the natural barrier island processes. Proposed dredging of a new channel across Santa Rosa Island (i.e., Navarre Pass) would likely amplify these effects. • Invasive species, especially nutria, have a substantial effect on geomorphology because they increase erosion and affect natural dune-building processes. • There is a heightened push for dredging a pass through Santa Rosa Island east of Navarre Beach, which would affect the national seashore. • Sand sliding and other visitor uses adversely affect the dunes on barrier islands and a relict dune on the north side of Naval Live Oaks. • Beach renourishment at non-NPS beaches could affect NPS beaches. • Marine debris washes onto barrier islands, including beach trash from visitors and industrial debris from drilling platforms and commercial ships and boats and larger debris such as buoys washing in from the Gulf of Mexico. • Maintaining the Pascagoula shipping channel in a fixed location reduces the area of Petit Bois Island as it migrates west and falls into the channel. This continually reduces island acreage, which impacts the designated wilderness. In time, Petit Bois Island will cease to exist east of the shipping channel and that portion of the Gulf Islands Wilderness will disappear. • Sea level rise has increased and is projected to increase an additional 1.82–2.32 feet by 2100. Climate change threatens barrier islands through loss of land, increased erosion, rising groundwater tables and possible salt water intrusion, increased risk of high intensity storm events, loss of nearby freshwater ecosystems, and a potential increase in nonnative plants and shift in ranges of native vegetation northward. **Opportunities** • Survey grade elevation data was collected in 2015 for national seashore facilities and assets in conjunction with the development of a Climate Friendly Parks Plan. This data assessed the vulnerability of national seashore roads and buildings to storm surge and sea level rise and will assist in guiding decisions and management in response to such threats. • The development of video and curriculum-based educational module about barrier island migration should be completed. • Education about the effects of trash could be improved by working with states, local communities, oil and gas developers, and the shrimping industry. This includes trash on the beach from visitors and industrial trash and large beach debris washing up from Gulf of Mexico. • The national seashore will work cooperatively with the Gulf Coast Network of the NPS Inventory and Monitoring Program as it conducts regular assessments of shoreline position and island topography.
Data and/or GIS Needs	• Administrative history. • Archeological survey. • Archeological overview and assessment. • Visitor services study. • GIS mapping of submerged oil and gas pipelines. • Acquisition of updated aerial imagery for GIS. • Studies of geomorphology and sand transport for Mississippi (Petit Bois Island) and Florida (Santa Rosa Island).

Fundamental Resource or Value	Barrier Islands
Planning Needs	• Marine resources management plan. • Wilderness stewardship and backcountry management plan. • Visitor use management plan. • Invasive species management plan. • Resource stewardship strategy. • Motorized vessel use plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Bald and Golden Eagle Protection Act; 16 USC 668 • Clean Water Act; 33 USC 1251-1387, 33 USC 1151 • Clean Air Act; 42 USC 7401 et seq. • Endangered Species Act of 1973, as amended; 16 USC 1531 et seq. • Federal Noxious Weed Act of 1974, as amended; 7 USC 801 et seq. • Migratory Bird Treaty Act; 16 USC 703-712 • National Invasive Species Act; 16 USC 4701 • National Environmental Policy Act of 1970; 42 USC 4321 • Wilderness Act (1964); 16 USC 1131 et seq. • Executive Order 13112, "Invasive Species" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS *Management Policies 2006* (§4.1) "General Management Concepts" • NPS *Management Policies 2006* (§4.1.4) "Partnerships" • NPS *Management Policies 2006* (§4.4.1) "General Principles for Managing Biological Resources" • NPS *Management Policies 2006* (§4.6.2) "Water Rights" • NPS *Management Policies 2006* (§4.6.4) "Floodplains" • NPS *Management Policies 2006* (§4.7) "Air Resource Management" • NPS *Management Policies 2006* (§4.7.2) "Weather and Climate" • NPS *Management Policies 2006* (§4.8.1.1) "Shorelines and Barrier Islands" • NPS *Management Policies 2006* (§4.10) "Lightscape Management" • Director's Order 18: *Wildland Fire Management* • Director's Order 77-2: *Floodplain Management* • NPS Reference Manual 18: *Wildland Fire Management* • NPS *Natural Resource Management Reference Manual 77* • NPS Procedural Manual 77-1: *Wetland Protection* • NPS Procedural Manual 77-2: *Floodplain Management*



Fundamental Resource or Value	Visitor Opportunities
Related Significance Statements	Significance statements 1, 3, 4, and 5.
Current Conditions and Trends	**Conditions** • Visitors come to Gulf Islands to visit fortifications, enjoy the beaches, fish, boat, view wildlife, and engage in other outdoor activities. • Road washouts at Fort Pickens and Santa Rosa can negatively affect visitor experience. • The national seashore is planning to eliminate road shoulder parking at Perdido Key through the construction of parking lots. This will ensure that impacts to dunes and beaches are limited to specific areas and will help maintain wildlife habitat. • Most visitors come from a six-state regional area, but more information is needed to better understand visitation patterns. • Wildlife viewing is a very common activity in many areas of the national seashore. • The national seashore does not have multiple-lane entry, and delayed entry may affect visitor experience. **Trends** • There is increasing pressure for inappropriate commercial uses of NPS lands and water, and protected areas generally, due to increasing regional development. The national seashore has received requests for these types of uses, which could affect the viewshed. • Visitation has increased about 6% during the past 10 years (about 300,000 visitors per year). As population increases in the area, visitation will likely continue to increase. • Visitor uses and activities have been changing over time and include increased kite surfing and powered parachutes.
Threats and Opportunities	**Threats** • Marine debris washes up onto barrier islands, including recreational and beach trash from visitors and industrial trash from drill platforms and commercial ships and boats and larger debris such as buoys washing in from the Gulf of Mexico. • Light trespass is an issue near more developed areas of the national seashore and affects wildlife and night sky. • Flooding occurs regularly at Fort Pickens. The road in that area is being rerouted in 2016 and a ferry system implemented. Both could serve as primary visitor access if an extreme flooding / storm event washes out Fort Pickens Road. • Although Florida State Road 399 is considered by many visitors to be a commuter route, it is a scenic driving route in a national park unit. Many wildlife-vehicle collision incidents occur along this road. • Inappropriate fishing practices (e.g., improperly discarding monofilament fishing line) affect fishery resources, waterbirds, and sea turtles. • A concentration of visitors and varied activities in certain areas (i.e., Crab Island) can create safety hazards, including conflicts between swimmers and motor boats. • Many visitors access national seashore sites via water, and such access can affect seagrass and wildlife and erode shorelines. • Charter boats and other commercial uses are operating without permits. • Conflicts between various transportation modes including bikes, vehicles, pedestrians, and golf carts are common.

Fundamental Resource or Value	Visitor Opportunities
Threats and Opportunities	**Opportunities** • The national seashore has hired a visual information specialist to take advantage of new technologies and outreach methods to reach new visitors and better inform current visitors. • The national seashore is pursuing a ferry system for Pensacola Bay to provide nonvehicular visitation opportunities and would have departure/landing facilities at the city of Pensacola, Fort Pickens, and Pensacola Beach. • The national seashore's strong volunteer program could be expanded. Volunteers, including retired military and site hosts, could assist with interpretation, visitor center sales, maintenance work, resource management, and so forth. • Pre-orientation and educational outreach efforts to visitors before they arrive at the national seashore could be developed. • The national seashore has hired an education specialist to address increasing curriculum-based educational programming. This outreach could include addressing the influences from climate change on the coastal system. • Education about the effects of trash—trash on the beach from visitors and industrial trash and large beach debris washing up from Gulf of Mexico—could be improved by working with states, local communities, oil and gas developers, and the shrimping industry.
Data and/or GIS Needs	• Visitor services study. • Study of effectiveness of visitor management efforts.
Planning Needs	• Long-range interpretive plan. • Visitor use management plan. • Exhibit plan. • Motorized vessel use plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Americans with Disabilities Act of 1990; 42 USC 12101 et seq. • Architectural Barriers Act of 1968; 42 USC 4151 et seq. • Architectural Barriers Act Accessibility Standards 2006; implemented in 36 CFR 1191.1 • Clean Water Act; 33 USC 1251-1387, 33 USC 1151 • Clean Air Act; 42 USC 7401 et seq. • NPS Concessions Management Improvement Act of 1998; 54 USC 101912 • Rehabilitation Act of 1973; 29. USC 701 et seq. **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (chapter 7) "Interpretation and Education" • NPS *Management Policies 2006* (chapter 8) "Use of the Parks" • NPS *Management Policies 2006* (chapter 9) "Park Facilities" • NPS *Management Policies 2006* (chapter 10) "Commercial Visitor Services" • Director's Order 6: *Interpretation and Education* • Director's Order 42: *Accessibility for Visitors with Disabilities in National Park Service Programs and Services* • NPS *Transportation Planning Guidebook*



Fundamental Resource or Value	Gulf Islands Wilderness
Related Significance Statements	Significance statement 3.
Current Conditions and Trends	**Conditions** • The wilderness boundary begins at the mean high water mark, and activities in surrounding waters affect the wilderness islands. • A seven-acre administrative corridor on Horn Island is not wilderness. • Petit Bois Island is affected by maintaining the Pascagoula shipping channel in a fixed location. • The wilderness islands receive high visitation. • Recurring storms destroy vegetation and facilities on the islands, causing costly damages. • Visitors can experience the solitude of wilderness character in quieter seasons (November–February). • Large congregations of boaters use the tips of the wilderness islands, especially on summer weekends. • Night skies in the wilderness are somewhat affected by nearby urban and developed areas that emit light. The skies over the Gulf are influenced less by artificial light and offer better views of the night skies. • The wilderness areas are less influenced by human-caused sounds, and overall sound levels are lower than in other areas of the national seashore. **Trends** • Anecdotal evidence suggests recreational use is increasing, but visitation data are needed to confirm this trend. • Problems regarding safety are increasing due to isolation of the islands and the inexperience of some visitors. • Light pollution and noise is increasing due to urban development, oil and gas industry development, and military overflights. • Changing use patterns are resulting in higher concentrations of boats.

Fundamental Resource or Value	Gulf Islands Wilderness
Threats and Opportunities	**Threats** • In the future, the owners of inholdings may develop or build structures on the wilderness islands. • Marine debris continues to wash onto barrier islands, including recreational and beach trash from visitors and debris from off-shore drill rigs and commercial ships and boats and larger debris washing in from the Gulf of Mexico. • Camping equipment left on wilderness islands affects visitor experience, wildlife, and wildlife habitat. • Threats from oil and gas development include visual impacts, the potential for spills and accidents, and off-gassing, air pollution, noise, and unpleasant smells. • The quality of scenic views, night skies, and natural sounds is deteriorating due to urban development on the mainland and oil and gas industry development in the Gulf of Mexico. • Maintaining the Pascagoula shipping channel in a fixed location is reducing the area of Petit Bois Island. • Intense visitation affects wilderness character. **Opportunities** • Gateway signage could be improved to inform visitors that they are entering wilderness a wilderness area and National Park Service unit and to educate them about resource impacts. • The NPS identity could be improved for visitors who come to the wilderness islands. • The need for and level of facilities in the administrative corridor on Horn Island could be evaluated and planning begun for the removal of existing structures and facilities. • The Air National Guard tower on Horn Island could be removed. • A floating education center to accommodate approximately 30 people could be developed. Support facilities to take educational groups to the islands could reduce visitor impacts on the wilderness islands. • A floating ranger station / houseboat could be a place for visitor boats to tie up and talk to a ranger, and use bathroom facilities. This floating station could be combined with the floating education center. • Education about the effects of trash could be improved by working with states, local communities, oil and gas developers, and the shrimping industry. This trash includes trash on the beach from visitors and industrial trash and large beach debris washing up from Gulf of Mexico. • Completion of a wilderness and backcountry management plan could help better manage visitation. • Education about the effects of noise and light pollution on national seashore resources, wildlife, and wilderness could be improved.
Data and/or GIS Needs	• Archeological survey. • Archeological overview and assessment. • Visitor services study. • GIS mapping of submerged oil and gas pipelines. • Geomorphology and sand transport studies for Mississippi (Petit Bois Island) and Florida (Santa Rosa Island).
Planning Needs	• Wilderness stewardship and backcountry management plan. • Visitor use management plan. • Resource stewardship strategy. • Wilderness eligibility assessment. • Motorized vessel use plan.

Fundamental Resource or Value	Gulf Islands Wilderness
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Bald and Golden Eagle Protection Act; 16 USC 668 • Clean Water Act; 33 USC 251-1387, 33 USC 1151 • Clean Air Act; 42 USC 7401 et seq. • Endangered Species Act of 1973, as amended; 16 USC 1531 et seq. • Federal Noxious Weed Act of 1974, as amended; 7 USC 2801 et seq. • Migratory Bird Treaty Act; 16 USC 703-712 • National Invasive Species Act; 16 USC 4701 • National Environmental Policy Act of 1970; 42 USC 4321 • Wilderness Act (1964); 16 USC 1131 et seq. • Executive Order 13112, "Invasive Species" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (chapter 6) "Wilderness Preservation and Management" • NPS *Management Policies 2006* (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS *Management Policies 2006* (§4.1) "General Management Concepts" • NPS *Management Policies 2006* (§4.1.4) "Partnerships" • NPS *Management Policies 2006* (§4.4.1) "General Principles for Managing Biological Resources" • NPS *Management Policies 2006* (§4.6.2) "Water Rights" • NPS *Management Policies 2006* (§4.6.4) "Floodplains" • NPS *Management Policies 2006* (§4.8.1.1) "Shorelines and Barrier Islands" • NPS *Management Policies 2006* (§4.9) "Soundscape Management" • NPS *Management Policies 2006* (§4.10) "Lightscape Management" • NPS *Management Policies 2006* (§4.7) "Air Resource Management" • NPS *Management Policies 2006* (§4.7.2) "Weather and Climate" • Director's Order 18: *Wildland Fire Management* • Director's Order 41: *Wilderness Stewardship* • Director's Order 47: *Preservation of the Acoustic Environment and Noise Management* • Director's Order 77-2: *Floodplain Management* • *Keeping It Wild in the National Park Service: A User Guide to Integrating Wilderness Character into Park Planning, Management, and Monitoring* • NPS *Natural Resource Management Reference Manual 77* • NPS Procedural Manual 77-1: *Wetland Protection* • NPS Procedural Manual 77-2: *Floodplain Management* • NPS Reference Manual 18: *Wildland Fire Management* • NPS Reference Manual 41: *Wilderness Stewardship*

Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental resources and values. For example, a key issue may pertain to the potential for a fundamental resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but which still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Gulf Islands National Seashore and the associated planning and data needs to address them:

- **The Need to Maintain Public Access to Fort Pickens.** Public access to Fort Pickens is one of the biggest management concerns at the national seashore. Fort Pickens is accessed by a 7-mile asphalt road that traverses the extremely narrow and low-lying western end of Santa Rosa Island. Approximately 700,000 visitors use the Fort Pickens Road each year to access Fort Pickens, or 14% of total national seashore visitors. Because of elevation and proximity to shorelines on either side of the island, the Fort Pickens Road is extremely susceptible to the effects of storms and climate change. It has been destroyed or significantly damaged several times by tropical storm events. As stated in the national seashore's general management plan, if the road is destroyed or significantly damaged it would be rebuilt only if feasible. The national seashore is working to complete a ferry system that would provide alternate visitor and staff access to the fort should a storm destroy the road or temporarily render it impassable. Cultural resource data and proactive planning would help implement changes in response to future closures of Fort Pickens Road, as well as water-based access to the Fort Pickens area.

  Associated planning needs:

  - Commercial services plan
  - Historic structure reports
  - Fort Pickens campgrounds development concept plan
  - Fort Pickens Road transition plan

  Associated data needs:

  - Cultural landscape inventories

- **Preparations for Storm Recovery and Sustainability.** Preparation for the effects of storms and climate change on infrastructure and facilities throughout the national seashore is critical. Staff have an opportunity to be proactive rather than reactive by incorporating a number of recent studies and data sources in order to make decisions about infrastructure and operations. The national seashore is a Climate Friendly Park, improving sustainability and environmental leadership. Robust planning both for adaptation to climate change and for disaster recovery and impact mitigation are needed to help national seashore managers make sound decisions about storm recovery and sustainability for operations and facilities.

  Associated planning needs:

  - Planning for adaptation to climate change
  - Disaster recovery and impact mitigation plan

- **Impacts of Oil and Gas Development in the Gulf of Mexico.** The waters around all barrier islands in the national seashore Mississippi District have been targeted for minerals leasing by the State of Mississippi and the federal Bureau of Ocean Energy Management. Activities would include but are not limited to seismic surveying, oil and gas extraction, drilling, and other mineral production operations. Should leasing lead to production, single or multiple four- to six-story oil and/or gas drilling rigs could be installed adjacent to NPS boundaries. Other possible developments may occur in the future in Mississippi or adjacent states, on land or in water bodies. The National Park Service is opposed to such activities near the national seashore because of a variety of possible and known threats to national seashore resources and values. These threats include subsidence; effects on air and water quality; degradation of night sky and natural sound; and effects on archeological sites, historic structures, wilderness character, and visitor experience, and NPS operations and seashore management. In addition the National Park Service has obligations under the Wilderness Act. The national seashore requests continued support from the NPS Southeast Regional Office in coordinating with the Bureau of Ocean Energy Management to eliminate or mitigate the above concerns. A visual resource inventory and GIS mapping of submerged oil and gas pipelines are critical in assisting the national seashore with making informed decisions and working with partner agencies.

  Associated data needs:

  - Visual resource inventory
  - GIS mapping of submerged oil and gas pipelines

  Associated planning needs:

  - Visual resource management plan

- **Recovery from Deepwater Horizon Oil Spill.** Staff of the national seashore continue to spend a great deal of time and resources on restoration efforts related to the 2010 Deepwater Horizon oil spill. The cleanup work will continue for years to come as small quantities of tar balls wash ashore and occasional tar mats are uncovered. The planning and management of restoration projects is ongoing and involves considerable staff time. No specific planning or data needs are identified at this time, but the national seashore requests continued support from the NPS Environmental Quality Division and the NPS Southeast Regional Office to negotiate planning and funding for restoration projects.

- **Mississippi Coastal Improvement Program.** This congressionally mandated program was authorized in 2006 following Hurricane Katrina. The barrier island restoration plan calls for placement of 22 million cubic yards (mcy) of sand: A) 0.6 mcy on the north shore of West Ship Island to protect Fort Massachusetts; B) 13.5 mcy in the Camille Cut breach to reconnect East and West Ship Islands; C) 5.5 mcy on the south shore of East Ship Island to help sustain the Camille Cut fill; D) 2 mcy on the east shore of Cat Island; and E) beneficial placement of future dredged material from the Pascagoula shipping channel in the littoral zone southwest of Sand Island (i.e., West Petit Bois Island). Work is expected to begin in the winter of 2017 and further support will be required to track the project and its impacts.

- **Alteration of Sand Transport System.** The alteration of the sand transport system around Gulf Islands National Seashore is one of the most pressing issues because of potential adverse impacts on the barrier islands, including effects on natural physical processes. Continuing dredging of shipping channels adjacent to the national seashore affects the natural movement, accretion, and erosion of sand that sustains the islands. Ship Island has diminished 64% in size mostly due to the removal of sand from the littoral zone related to ship channel dredging and improper placement of dredge material. Partnerships with the U.S. Army Corps of Engineers, Bureau of Ocean Energy Management, U.S. Geological Survey, and National Oceanic and Atmospheric Administration are critical to mitigating future alterations of the sand transport system. A study of the natural movement of Petit Bois Island and the projected westward migration of the island beyond the Pascagoula shipping channel, if the shipping channel did not exist, is critical to determine the proper placement of dredge material west of the channel. Ultimately Petit Bois Island will cease to exist east of the channel as it migrates westward and falls into the channel. It is only through understanding the natural sand transportation process and proper placement of dredge materials west of the channel that the island can be mechanically reconstituted west of the channel. Similar sand transportation studies of Santa Rosa Island would address the potential adverse effects of a proposal to cut a channel through the island at the west end of Navarre Beach. The seashore's Santa Rosa, Fort Pickens, and Perdido Key areas are downdrift of this proposed channel and potentially would be affected by interruption of the natural westward sand transport that sustains these areas of the seashore.

  Associated data needs:

  - Geomorphology and sand transport studies for Mississippi (Petit Bois Island) and Florida (Santa Rosa Island)

- **Managing Water-Based Recreation.** The national seashore needs to establish visitor capacity because extreme crowding is a problem in certain areas, particularly the wilderness islands. A lack of NPS identity, insufficient law enforcement personnel, conflicts in visitor activities, and inappropriate visitor activities all contribute to this problem. Areas of special concern include the western tip of Horn Island, Crab Island, and the Fort McRee area. At Crab Island, seagrass beds are being decimated by boat propellers and other human activities; at Horn Island, visitor numbers and activities are causing very negative effects on wilderness character; and at Fort McRee, the lack of bathroom facilities results in resource damage and inappropriate visitor behaviors. Information regarding visitor preferences and values could be provided by a visitor services study. With this information, the national seashore could develop a visitor use management plan that would help determine appropriate visitation levels and methods for managing visitor use. Wilderness planning would help address visitor use in wilderness and backcountry areas.

  Associated planning needs:

  - Wilderness stewardship and backcountry management plan
  - Visitor use management plan

  Associated data needs:

  - Visitor services study

Planning and Data Needs

To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform park management efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed

Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
Terrestrial and Marine Ecosystems; Barrier Islands	Marine resources management plan	H	This plan would assess and plan for protection of marine resources in the national seashore. It would build on new and existing marine resources information and identify specific management actions to ensure stewardship of marine resources including implementation of management zones in marine areas. Extensive information available through the Gulf Coast Network of the NPS Inventory and Monitoring Program would help inform this plan. The plan would be developed in cooperation with the Florida Fish and Wildlife Conservation Commission and the Mississippi Department of Marine Resources.
Key Issue: Maintain Public Access	Commercial services plan	H	A commercial services plan would evaluate all commercial services in the national seashore, evaluate those services deemed necessary and appropriate, and determine the most feasible method for providing commercial water transportation services, recreation services and rentals, and food services throughout the national seashore.
N/A	Cat Island development concept plan	H	Upon completion of land acquisition for Cat Island, a development concept plan would be initiated for the federal lands of the island to identify the long-term location of dock facilities and trail networks, resource restoration efforts, and infrastructure needs. This plan would be developed in cooperation with the state of Mississippi.
Key Issue: Maintain Public Access; Coastal Fortifications	Historic structure reports	H	The existing historic structure reports for the national seashore do not define significant historic features and period(s) of significance and do not propose treatment recommendations. Existing reports should be updated to include architectural and treatment sections, and where necessary additional reports should be completed. Reports also should include comprehensive condition assessments of conditions of historic structures and prioritize maintenance needs. Reports have been completed for the Fort Pickens mine storeroom, mine loading facility, and Observation Tower 234, and a report is underway for Battery Langdon. Ideally historic structure reports should be completed for all of the national seashore's historic structures.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	**Planning Needs**	**Priority (H, M, L)**	**Notes**
Visitor Opportunities	Long-range interpretive plan	H	A long-range interpretive plan would provide a vision for the future of interpretation, education, and visitor experience opportunities and recommend the most effective, efficient, and practical ways to address interpretive and educational goals and issues.
Terrestrial and Marine Ecosystems	Fisheries management plan	H	This plan would provide guidance for sport fishing and for effective management of the lionfish, an invasive species that is prevalent along this part of the Gulf Coast. There is a need for technical expertise in the development of this plan.
Key Issue: Oil and Gas Development	Visual resource management plan	H	This plan would use data from the visual resource inventory to identify potential effects on the visitor experience of oil and gas and other development. It also would identify specific goals and strategies for protection of important scenic views.
Key Issue: Managing Water-Based Recreation; Barrier Islands; Gulf Islands Wilderness	Wilderness stewardship and backcountry management plan	H (ongoing)	A 2004 wilderness management plan for the national seashore provides guidance on how wilderness areas in the national seashore should be managed. That plan is currently being updated and expanded to include some of the NPS current planning framework.
Key Issue: Managing Water-Based Recreation; Barrier Islands; Gulf Islands Wilderness; Visitor Opportunities; Terrestrial and Marine Ecosystems	Visitor use management plan	H	This plan would help identify visitor impacts at sites throughout the national seashore and provide recommendations for visitor use management, including appropriate visitation levels. The Gulf Islands Wilderness would be a major focus for this plan because resource and visitor experience impacts are most notable in that area; however, the plan should include guidance for all high-use areas. This plan would be informed by the visitor services study that was identified as a data need.
Key Issue: Storm Recovery and Sustainability	Planning for adaptation to climate change	M	A comprehensive strategy is needed to address the effects of climate change on resources, facilities, and visitor opportunities. This strategy should evaluate threats associated with climate change at the national seashore and identify further planning and data needs to guide adaptations to climate change adaptation.
Key Issue: Maintain Public Access	Fort Pickens campgrounds development concept plan	M	The plan would help guide modification of the Fort Pickens campground to create a "tent camping only" zone as described in the NPS preferred alternative in the general management plan, update recreational vehicle camping pads and hookups, and add primitive cabins for ferry passengers, hikers, boaters, and bicycle riders.
Key Issue: Maintain Public Access	Fort Pickens Road transition plan	M	Sustainability of operations at Fort Pickens is a concern for the national seashore considering the threat of climate change, increasing storm frequency, and sea level rise. This plan would provide guidance for the long-term management of the Fort Pickens area regarding infrastructure, natural and cultural resources, and visitor services.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	**Planning Needs**	**Priority (H, M, L)**	**Notes**
Key Issue: Storm Recovery and Sustainability	Disaster recovery and impact mitigation plan	M	As a coastal park unit, the national seashore is at increased risk from hurricanes and other similar natural disasters. This plan would provide guidance for disaster preparation and response, including mitigation measures and long-term sustainability of infrastructure and resources.
Barrier Islands; Terrestrial and Marine Ecosystems	Invasive species management plan	M	This plan would provide formal guidance regarding management of invasive species at the national seashore.
Coastal Fortifications	Cultural landscape reports	M	Cultural landscape reports would provide treatment recommendations for cultural landscapes at the national seashore, as well as help manage conflicts between visitor preferences and cultural landscape management requirements (such as birders wanting to remove vegetation that is part of a landscape or, conversely, protecting vegetation that should be removed). These reports would be informed by the cultural landscape inventories that were identified as a data need.
Visitor Opportunities	Exhibit plan	M	This plan would help guide implementation of recommendations in a future long-range interpretive plan, which was identified as a high priority need.
Barrier Islands; Coastal Fortifications; Gulf Islands Wilderness; Terrestrial and Marine Ecosystems	Resource stewardship strategy	L	This plan would provide comprehensive, long-range direction for natural and cultural resource management. It would establish a multiyear, ecosystem-based planning process to implement inventories, condition assessments, monitoring, and restoration projects for natural and cultural resources. A resource condition assessment could be included in this process.
N/A	Pensacola Lighthouse development concept plan	L	The Pensacola Lighthouse is managed by the Pensacola Lighthouse Association under a long-term agreement with the U.S. Coast Guard. If management authority of the Pensacola Lighthouse were transferred to the National Park Service, a development concept plan should be initiated to identify site development, accessibility, interpretive programs, and cultural resource management implementation strategies.
Gulf Islands Wilderness	Wilderness eligibility assessment	L	This assessment would help determine if the administrative corridor of Horn Island could be included as part of the Gulf Islands Wilderness once facilities on it are removed and the area restored.
Terrestrial and Marine Ecosystems; Barrier Islands; Visitor Opportunities; Gulf Islands Wilderness	Motorized vessel use plan	L	The national seashore has been working to complete a personal watercraft environmental impact statement, and this plan would complement that effort.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Coastal Fortifications	Historic resource study	H	A historic resource study is the primary document used to identify and manage the historic resources. It would help the national seashore better understand the significance of the cultural resources already identified within its boundaries, write or update national register nominations, and make sound management decisions about these resources (single source document for history of national seashore and specific sites and structures; comprehensive big picture for all resources). The national seashore has a historical data section for the Pensacola Harbor Defense Project.
Barrier Islands; Coastal Fortifications	Administrative history	H	Gulf Islands National Seashore has a complex history of land ownership, prior land uses, and management priorities. This effort would analyze the seashore and its establishment and administration, as well as NPS programs and policies and how they have affected the unit. It would help managers be better informed about contemporary issues and bring greater awareness to their policy and program decisions. A collection of oral histories should be a part of this effort, including that of Jerry Eubanks who was superintendent from 1984 to 2009.
Barrier Islands; Gulf Islands Wilderness	Archeological survey	H	An archeological survey would help identify archeological sites or artifacts in the national seashore. It would be used to inform a future archeological overview and assessment.
Key Issue: Alteration of Sand Transport System; Barrier Islands; Gulf Islands Wilderness	Geomorphology / sand transport studies for Mississippi (Petit Bois Island) and Florida (Santa Rosa Island)	H	In Mississippi, this study would allow the national seashore to better understand natural migration of Petit Bois Island, and would help direct the placement of material dredged from the Pascagoula shipping channel. It would support the island's mechanically placed reemergence west of the channel. In Florida, the study would allow the national seashore to better understand natural migration of Santa Rosa Island and would help demonstrate potential impacts if a channel were cut through the island and anchored with jetties east of Navarre Beach. There has been an effort to promote such an artificial channel since the 1960s.
Key Issue: Oil and Gas Development	Visual resource inventory	H	Oil and gas development is prevalent along the Gulf Coast. A visual resource inventory would identify key viewsheds and analyze the visual effects of oil and gas development activities on visitor experience. It would serve as the baseline for development of a visual resource management plan.
Key Issue: Managing Water-Based Recreation; Barrier Islands; Gulf Islands Wilderness; Visitor Opportunities; Terrestrial and Marine Ecosystems	Visitor services study	H	The national seashore needs a comprehensive visitor services study to better inform national seashore managers about important and emerging visitor use issues. This information would be used in a variety of ways, from improving visitor services and facilities to redirecting resource protection efforts to guiding interpretive programming. It would also be used to inform the visitor use management plan and commercial services plan that were identified as planning needs.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Key Issue: Maintain Public Access; Coastal Fortifications	Cultural landscape inventories	M	Nine potential cultural landscapes exist within Gulf Islands National Seashore, including Naval Live Oaks Plantation, Fort Pickens, Fort Barrancas, Advanced Redoubt, and Fort Massachusetts. Cultural landscape inventories should be completed for all of these areas prior to developing more site-specific treatments as part of the cultural landscape reports, which were identified as a planning need.
Coastal Fortifications	Historic American Buildings Survey / Historic American Engineering Record documentation	M	A Historic American Buildings Survey and Historic American Engineering Record documentation is needed for several coastal fortifications at the national seashore and for Civilian Conservation Corps cottages at the Davis Bayou area in Mississippi.
Visitor Opportunities; Terrestrial and Marine Ecosystems	Study of effectiveness of visitor management efforts	M	The national seashore has used a series of strategies (e.g., speed control, area closures) to manage inappropriate visitor activities, and this study would provide information regarding the effectiveness of these strategies. This information could be used with regard to natural resource protection and visitor safety.
Coastal Fortifications	National Register of Historic Places nominations	M (ongoing)	Several national register nominations have been completed for the national seashore, but, because of standards at the time they were written, some lack detailed information. Rewriting or amending the existing nominations to current standards and including new information would help the national seashore make sound management decisions for their preservation and/or use. A nomination for the coastal defenses at Fort Pickens is currently being prepared.
Key Issue: Oil and Gas Development; Barrier Islands; Gulf Islands Wilderness	GIS mapping of submerged oil and gas pipelines	L	GIS mapping of submerged oil and gas pipelines within national seashore boundaries is needed. This mapping effort would include consolidation of existing data and collection of new data where needed.
Barrier Islands; Gulf Islands Wilderness	Archeological overview and assessment	L	Existing information on past archeological surveys, including who carried out the research, when and where the research was conducted, and major findings, should be collected. Future surveys needed in the national seashore should be identified.
Barrier Islands	Acquire updated aerial imagery for GIS	L	Imagery available through Geocortex is outdated (2010), and updated imagery would help the national seashore identify changes in the barrier islands over time. These data could be purchased from imagery providers or flown independently by the national seashore through a contractor. Imagery could then be added to the NPS Park Atlas web map for use by staff.

Part 3: Contributors

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Appendixes

Appendix A: Enabling Legislation and Legislative Acts for Gulf Islands National Seashore

Public Law 91-660

AN ACT

January 8, 1971
[H. R. 10874]

To provide for the establishment of the Gulf Islands National Seashore, in the States of Florida and Mississippi, for the recognition of certain historic values at Fort San Carlos, Fort Redoubt, Fort Barrancas, and Fort Pickens in Florida, and Fort Massachusetts in Mississippi, and for other purposes.

Gulf Islands National Seashore. Establishment.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in order to preserve for public use and enjoyment certain areas possessing outstanding natural, historic, and recreational values, the Secretary of the Interior (hereinafter referred to as the "Secretary") may establish and administer the Gulf Islands National Seashore (hereinafter referred to as the "seashore"). The seashore shall comprise the following gulf coast islands and mainland areas, together with adjacent water areas as generally depicted on the drawing entitled "Proposed Boundary Plan, Proposed Gulf Islands National Seashore," numbered NS–GI–7100J, and dated December 1970:

(1) Ship, Petit Bois, and Horn Islands in Mississippi;
(2) the eastern portion of Perdido Key in Florida;
(3) Santa Rosa Island in Florida;
(4) the Naval Live Oaks Reservation in Florida;
(5) Fort Pickens and the Fort Pickens State Park in Florida; and
(6) a tract of land in the Pensacola Naval Air Station in Florida that includes the Coast Guard Station and Lighthouse, Fort San Carlos, Fort Barrancas, and Fort Redoubt and sufficient surrounding land for proper administration and protection of the historic resources.

Lands, waters, acquisition.

SEC. 2. (a) Within the boundaries of the seashore, the Secretary may acquire lands, waters, and interests therein by donation, purchase with donated or appropriated funds, or exchange, except that property owned by a State or any political subdivision thereof may be acquired only with the consent of the owner. The Secretary may acquire by any of the above methods not more than one hundred thirty-five acres of land or interests therein outside of the seashore boundaries on the mainland in the vicinity of Biloxi-Gulfport, Mississippi, for an administrative site and related facilities for access to the seashore. With the concurrence of the agency having custody thereof, any Federal property within the seashore and mainland site may be transferred without consideration to the administrative jurisdiction of the Secretary for the purposes of the seashore.

Residential property, right of use and occupancy.

(b) With respect to improved residential property acquired for the purposes of this Act, which is beneficially owned by a natural person and which the Secretary of the Interior determines can be continued in that use for a limited period of time without undue interference with the administration, development, or public use of the seashore, the owner thereof may on the date of its acquisition by the Secretary retain a right of use and occupancy of the property for noncommercial residential purposes for a term, as the owner may elect, ending either (1) at the death of the owner or his spouse, whichever occurs later, or (2) not more than twenty-five years from the date of acquisition. Any right so retained may during its existence be transferred or assigned. The Secretary shall pay to the owner the fair market value of the property on the date of such acquisition, less their fair market value on such date of the right retained by the owner.

"Improved residential property."

(c) As used in this Act, "improved residential property" means a single-family year-round dwelling, the construction of which began before January 1, 1967, and which serves as the owner's permanent place of abode at the time of its acquisition by the United States, together with not more than three acres of land on which the dwelling and appurtenant buildings are located that the Secretary finds is reasonably necessary for the owner's continued use and occupancy of the dwelling: *Provided*, That the Secretary may exclude from improved residential property any marsh, beach, or waters and adjoining land that the Secretary deems is necessary for public access to such marsh, beach, or waters.

Termination.

(d) The Secretary may terminate a right of use and occupancy retained pursuant to this section upon his determination that such use and occupancy is being exercised in a manner not consistent with the purposes of this Act, and upon tender to the holder of the right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination.

Hunting and fishing.

SEC. 3. The Secretary shall permit hunting and fishing on lands and waters within the seashore in accordance with applicable Federal and States laws: *Provided*, That he may designate zones where, and establish periods when, no hunting or fishing will be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any regulations issued by the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate State agencies responsible for hunting and fishing activities.

Oil and gas rights-of-way.

SEC. 4. Any acquisition of lands, waters, or interests therein shall not diminish any existing rights-of-way or easements which are necessary for the transportation of oil and gas minerals through the seashore which oil and gas minerals are removed from outside the boundaries thereof; and, the Secretary, subject to appropriate regulations for the protection of the natural and recreational values for which the seashore is established, shall permit such additional rights-of-way or easements as he deems necessary and proper.

Administration.

39 Stat. 535.

SEC. 5. Except as otherwise provided in this Act, the Secretary shall administer the seashore in accordance with the Act of August 25, 1916 (30 Stat. 535), as amended and supplemented (16 U.S.C. 1 et seq.). In the administration of the seashore the Secretary may utilize such statutory authorities available to him for the conservation and management of wildlife and natural resources as he deems appropriate to carry out the purposes of this Act. With respect to Fort Redoubt, Fort San Carlos, Fort Barrancas at Pensacola Naval Air Station, Fort Pickens on Santa Rosa Island, and Fort McRee on Perdido Key, Florida, and Fort Massachusetts on Ship Island, Mississippi, together with

such adjacent lands as the Secretary may designate, the Secretary shall administer such lands so as to recognize, preserve, and interpret their national historical significance in accordance with the Act of August 21, 1935 (49 Stat. 666; 16 U.S.C. 461–467), and he may designate them as national historic sites. The Act of July 2, 1948 (62 Stat. 1220), which provided for the establishment of the Pensacola National Monument, is hereby repealed.

Repeal. 16 USC 450gg.

SEC. 6. The Secretary of the Interior and the Secretary of the Army may cooperate in the study and formulation of plans for beach erosion control and hurricane protection of the seashore. Any such protective works or spoil deposit activities undertaken by the Chief of Engineers, Department of the Army, shall be carried out within the seashore in accordance with a plan that is acceptable to the Secretary of the Interior and that is consistent with the purposes of this Act.

Beach erosion control, study.

SEC. 7. There are hereby transferred from the National Wildlife Refuge System to the seashore the Horn Island and Petit Bois National Wildlife Refuges to be administered in accordance with the provisions of this Act.

Land transfer.

SEC. 8. Within four years from the date of the enactment of this Act, the Secretary of the Interior shall review the area within the Gulf Islands National Seashore and shall report to the President, in accordance with subsections 3 (c) and 3 (d) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and (d)), and recommend as to the suitability or nonsuitability of any area within the seashore for preservation as wilderness, and any designation of any such area as a wilderness shall be accomplished in accordance with said subsections of the Wilderness Act.

Review.

Report to President.

SEC. 9. No provision of this Act, or of any other Act made applicable thereby, shall be construed to affect, supersede, or modify any authority of the Department of the Army or the Chief of Engineers, with respect to navigation or related matters except as specifically provided in section 6 of this Act.

SEC. 10. There is hereby established a Gulf Islands National Seashore Advisory Commission. The Commission shall terminate ten years after the date the seashore is established pursuant to this Act. The Commission shall be composed of three members from each county in which the seashore is located, each appointed for a term of two years by the Secretary as follows:

Gulf Islands National Seashore Advisory Commission, establishment, membership.

(1) one member to be appointed from recommendations made by the county commissioners in the respective counties;

(2) one member to be appointed from recommendations made by the Governor of the State from each county; and

(3) one member to be designated by the Secretary from each county.

Provided, That two members shall be appointed to the Advisory Commission in each instance in counties whose population exceeds one hundred thousand.

The Secretary shall designate one member to be Chairman. Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

Members of the Commission shall serve without compensation as such. The Secretary is authorized to pay the expenses reasonably incurred by the Commission in carrying out its responsibilities under this Act on vouchers signed by the Chairman.

The Secretary or his designee shall, from time to time, consult with the Commission with respect to the matters relating to the development of the Gulf Islands National Seashore.

SEC. 11. There are authorized to be appropriated not more than $3,120,000 for the acquisition of lands and interests in lands and not more than $14,779,000 (1970 prices) for development, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indices applicable to the types of construction involved herein.

Approved January 8, 1971.

AREA: GULF ISLANDS NATIONAL SEASHORE, FLORIDA AND MISSISSIPPI

AUTHORIZATION

Act of January 8, 1971 (P.L. 91-660, 84 Stat. 1967), authorized the establishment of Gulf Islands National Seashore.

*ACQUISITION AUTHORITY

Act of January 8, 1971, authorized acquisition by donation, purchase with donated or appropriated funds, or exchange. Lands owned by a State or a political subdivision thereof may be acquired only with the owner's consent. The Secretary may acquire up to 135 mainland acres outside the boundary in the vicinity of Biloxi-Gulfport, Mississippi, for an administrative site. With the concurrence of the agency having custody thereof, Federal property within the boundary and the mainland site may be transferred, without reimbursement, to the Secretary of the Interior.

Act of November 10, 1978 (P.L. 95-625, 92 Stat. 3474), authorized acquisition by donation, purchase with donated or appropriated funds, exchange or transfer. Lands owned by a State or political subdivision thereof may be acquired only by donation.

Act of October 18, 1988 (P.L. 100-501, 102 Stat.2502), authorized the exchange of certain lands between the State of Florida and the Secretary of the Air Force. Lands so acquired by the Secretary of the Air Force but not needed by the Department of Defense shall be transferred, without reimbursement, to the Secretary of the Interior for purposes of Gulf Islands National Seashore.

Act of December 21, 2000 (P.L. 106-554, 114 Stat. 2763A-231), amended P.L. 91-660 to include within the boundary, upon its acquisition, approximately 2,000 acres of land on Cat Island, Mississippi, as generally depicted on the map numbered 635/80085, and dated November 9, 1999. With regard to the Cat Island addition, the Secretary may acquire, from a willing seller only: all land comprising the parcel described that is above the mean line of ordinary high tide, lying and being situated in Harrison County, Mississippi; an easement over the approximately 150-acre parcel depicted as the “Boddie Family Tract” for the purpose of implementing an agreement with the owners of the parcel concerning the development and use of the parcel; lands and interests in land on Cat Island outside the 2,000-acre area depicted on the Cat Island map; submerged land that lies within 1 mile seaward of Cat Island (referred to in this title as the buffer zone), except that submerged land owned by the State of Mississippi or a subdivision thereof may be acquired only by donation.

Act of December 26, 2007 (Public Law 110-161, Gen. Provisions, DOI, Sec. 132), directs that funds included in the FY 2008 appropriation for land acquisition at Gulf Islands National Seashore be made available to the State of Mississippi pursuant to a grant agreement with the National Park Service, in order that the State may acquire land or interests in land on Cat Island. Any land or interests in land acquired with such funds shall be owned by the Federal Government and administered as part of the National Seashore.

ESTABLISHED
July 13, 1984, Federal Register (Vol. 49, No. 136)

BOUNDARY REVISIONS
Act of November 10, 1978, revised the boundary to include an additional 600 acres.

ACREAGE LIMITATIONS
Act of January 8, 1971, authorizes acquisition of no more than 135 acres for the mainland administrative site.

Act of April 20, 1972 (P.L. 92-275, 86 Stat. 123), increases the limitation to 400 acres.

STATUTORY CEILING FOR LAND ACQUISITION
Act of January 8, 1971, authorized the appropriation of up to $3,120,000 for land acquisition at the seashore.

Act of April 20, 1972, increased the appropriation ceiling to $3,462,000.

Act of October 21, 1976 (P.L. 94-578, 90 Stat. 2732), increased the appropriation ceiling to $22,162,000.

Act of November 10, 1978, authorized the appropriation of up to $300,000 for the acquisition of lands added by the act.

Act of December 21, 2000, authorized the appropriation of funds necessary to acquire lands and interests in land on and adjacent to Cat Island, Mississippi.

AREA NUMBERS
MIS -5320

*Denotes section revised Revised January 8, 2008

Appendix B: Basics for Wilderness Stewardship

Wilderness Background Information

The basic wilderness information section establishes a common understanding of the park unit's wilderness status, boundaries, and legislative history.

History of Land Status and Legislation

The Wilderness Act, signed into law in 1964, created the National Wilderness Preservation System to ensure an enduring resource of wilderness for future generations. The act provides that wilderness areas are to possess the following characteristics:

- The earth and its community of life are untrammeled by humans, where humans are visitors and do not remain.
- The area is undeveloped and retains its primeval character and influence without permanent improvements or human habitation.
- The area generally appears to have been affected primarily by the forces of nature, with the imprint of humans' work substantially unnoticeable.
- The area is protected and managed so as to preserve its natural conditions.
- The area offers outstanding opportunities for solitude or a primitive and unconfined type of recreation.

The Gulf Islands Wilderness was established as a component of the National Wilderness Preservation System by the National Parks and Recreation Act of 1978, Public Law 95-625 (November 10, 1978). This legislation designated approximately 1,800 acres of the seashore as wilderness and an additional 2,800 acres as potential wilderness, for a total of approximately 4,600 acres. As a whole, the national seashore covers 139,175 acres of land and water. Of this total acreage, 19,445.46 acres are fastlands (above water) and 119,730 acres are submerged lands.

The term "designated wilderness" refers to those lands and waters within the wilderness boundary that are under full federal ownership and management and are free of uses prohibited by the Wilderness Act. In contrast, potential wilderness at the national seashore consists of (a) inholdings not yet acquired by the National Park Service, or (b) areas where nonconforming uses continue to exist.

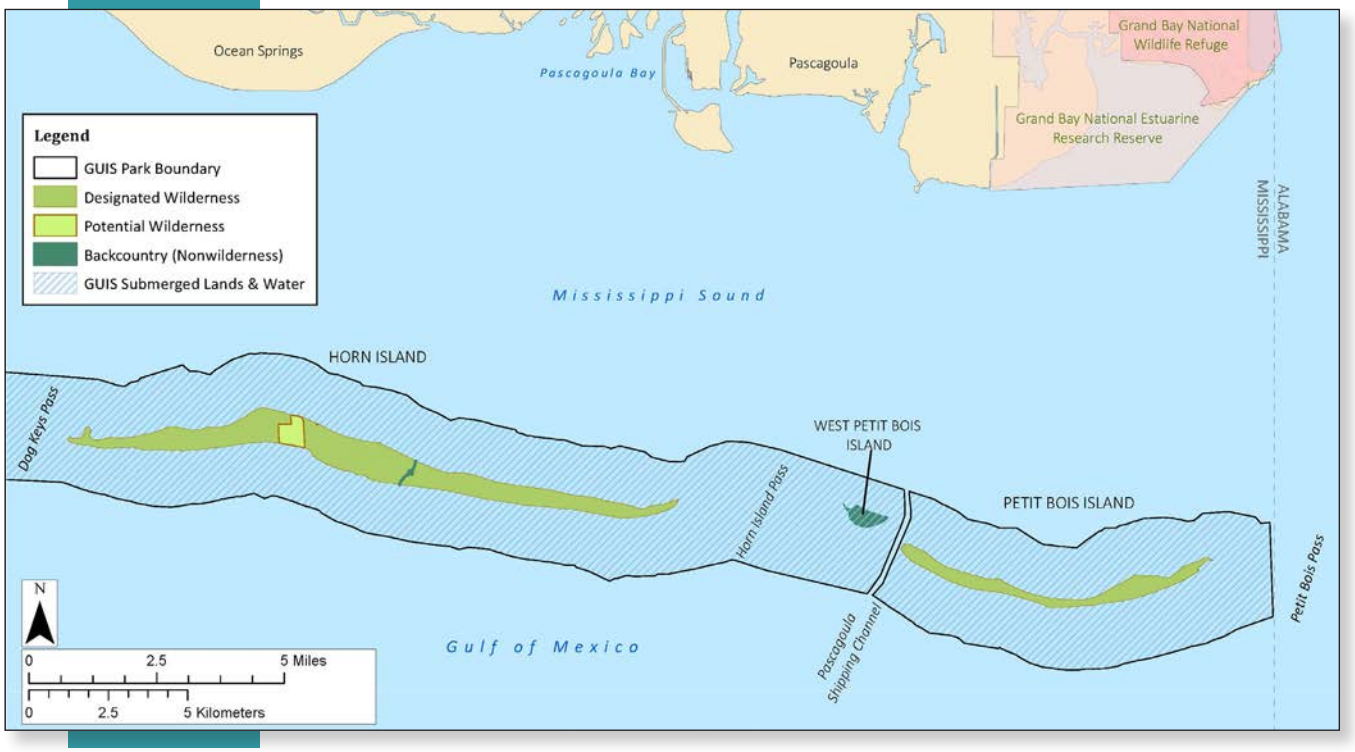
Current Land Status, Boundary Descriptions, and Map

The Gulf Islands Wilderness consists of lands on Horn and Petit Bois Islands off the coast of Mississippi. The wilderness boundary includes all of Petit Bois Island and most of Horn Island. Carved out from the wilderness on Horn is a narrow, north-south administrative corridor across the middle of the island. This seven-acre corridor houses a dock on the sound side of the island, a ranger residence, and a sand road connecting the dock with the beach. Another single acre was originally carved out of wilderness to encompass a well on the north shore of Horn Island. This area is now submerged and is not part of the wilderness. The wilderness boundary extends only to the mean high tide line and does not include any offshore waters or submerged lands at the seashore.

Determining acreages on unsurveyed and ever-changing barrier islands is extremely difficult. Accordingly, wilderness acreage at Gulf Islands traditionally has been measured in terms of the deeded acreage of the tracts comprising the wilderness. Using acreage figures drawn from deeds, the seashore presently manages approximately 4,630 acres as designated wilderness and 480 acres as potential wilderness. (The total acreage of the wilderness, 5,110 acres, exceeds the statutory ceiling of 4,600 acres, but the land area encompassed by the wilderness boundary is consistent with the map that accompanied the wilderness legislation.) The 4,630 acres presently designated as wilderness represents approximately 24% of the land area within the seashore's authorized boundary. In the future, as nonconforming uses cease, or as private parcels within the wilderness come into federal ownership, the National Park Service will convert additional potential wilderness to designated wilderness via a notice in the *Federal Register*.

The Wilderness Act of 1964 mandated that the Secretary of the Interior examine existing roadless areas larger than 5,000 acres within national park units and suggest those that should be included in the National Wilderness Preservation System. By policy, the National Park Service continues to perform wilderness eligibility assessments on all new lands added to the national park system. For those lands found eligible for wilderness designation, a subsequent wilderness study is done to decide which lands should be included in a formal wilderness proposal. At Gulf Islands, a wilderness eligibility assessment remains to be conducted on federally owned lands on Cat Island, a portion of which was added to the seashore in 2002.

By law, the Gulf Islands Wilderness is to be permanently preserved in its wilderness state. A map of the wilderness is provided below.



Wilderness Character Narrative

Introduction

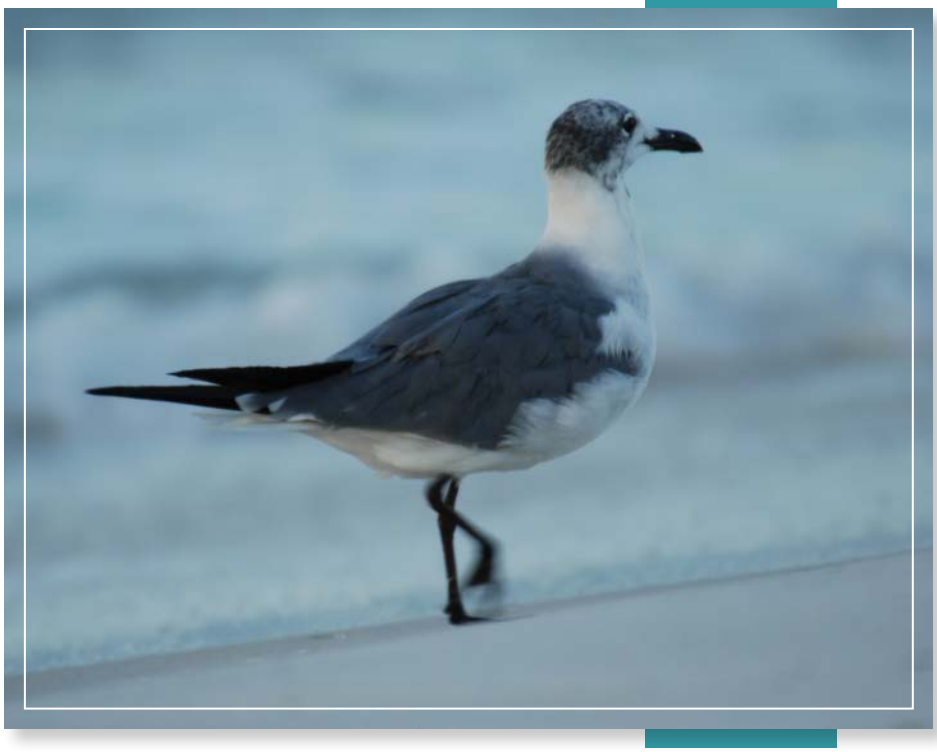
A wilderness character narrative is intended to be a qualitative description and positive affirmation of the unique attributes of a wilderness area. Representatives from each of the four wilderness managing agencies developed a national framework to monitor wilderness character using five qualities: natural, untrammeled, undeveloped, opportunities for solitude or primitive and unconfined recreation, and other features. These qualities are defined in brief as follows:

- **Natural**: Wilderness maintains ecological systems that are substantially free from the effects of modern civilization.
- **Undeveloped**: Wilderness retains its primeval character and influence, and is essentially without permanent improvements or modern human occupation.
- **Untrammeled**: Wilderness is essentially unhindered and free from modern human control or manipulation.
- **Solitude or Primitive and Unconfined Recreation**: Wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation.

The National Park Service has defined a fifth quality, "other features," to capture elements that are not included in the other four qualities—other ecological, geological, or other features of scientific, educational, scenic, or historical value. This quality, if present, is unique to an individual wilderness based on the features that are inside that wilderness. These features typically occur only in specific locations within a wilderness.

The following wilderness character narrative is intended to familiarize readers with the tangible and intangible resources and values that combine to create the Gulf Islands Wilderness. The document was created through collaboration by NPS staff and is a record of the shared understanding of wilderness character exemplified by Gulf Islands National Seashore.

This narrative serves as a framework for a wilderness stewardship plan, fosters integration among different staff and program areas that need to function together to effectively preserve wilderness character, and serves as a starting point for discussion with the public about the current and future state of the wilderness. Other more analytical documents, such as wilderness character baseline and wilderness character monitoring measures, may be derived from the qualitative description and threats to wilderness character identified by this wilderness character narrative.



Overview of Gulf Islands National Seashore Wilderness

Gulf Islands Wilderness consists of two of the largest undeveloped barrier islands in the Gulf of Mexico, Horn Island and Petit Bois Island. The ocean beach, evolving dunes, densely vegetated interior, and broad expanses of marsh with wildlife and plant species highly adapted to an ever-changing landscape create a symphony unique to Gulf Islands Wilderness.

From a distance the white sands appear as a mirage, radiating a soft glow reflecting the intense sun rays. Ten miles off the mainland shore, and inextricably tied to the surrounding waters, the islands seem like a world of their own. Untouched by the wave of modernization, Horn and Petit Bois Islands remain secluded in natural brilliance, in contrast with the usual sights, sounds and modifications of an increasingly populous and mechanized civilization. A visit to the wilderness islands requires passage across a vast, open expanse of water with changing conditions, at times perfectly still mirroring the blue sky and at other times roaring with turbulent storms.

Only a short period ago on the geological time scale there was no sea at all where the long, narrow barrier islands are now. Melting ice sheets of the last glacial period raised sea levels, pushing the ocean over the land about 6000 to 7000 years ago. These ropes of white quartz sand were derived from the eroding southern Appalachian Mountains and carried by flowing rivers to the gulf over thousands of years. The islands' position and land areas have intrigued many scientists because they are highly dynamic and the magnitudes of their movement are so great.

Gulf Islands Wilderness belongs to the Mississippi-Alabama barrier chain, as part of the last surviving portions of an ecological continuum of long, narrow barrier islands that once extended from Cape Cod to Mexico. Originating less than 4,500 years ago, these submerged sand shoals emerged from the depths of the ocean basin and aggraded as sea level rose. The presence of this 105-km-long barrier island system and the shoals between them has created the rich lagoon environment of the Mississippi Sound.



Prehistoric presence of humans is something of a mystery with not much documented. American Indians have explored the islands but due to the vast distance from the mainland, may not have taken up permanent residence. Few if any studies aimed specifically at investigating prehistoric and historic activities have been made to date and therefore knowledge of historical or archeological resources within potential or designated wilderness is limited.

European discovery of this part of the New World was followed by a struggle between colonial powers for its control. Both Spain, in the mid-1500s, and France, about the 1700s, attempted to establish settlements in present-day Mississippi. The first map showing Horn Island, then named Isla de Malhada, was drawn by Cabeza de Vaca in the 1500s after finding refuge on a small island measuring 5 leagues long and 2 leagues wide. Horn Island was given many names. The French-Canadian explorer of the late 1600s Sieur Bienville called it Horn, owing to the fact that one of his men had lost a powder horn there. As a reward for his explorations, Bienville was granted Horn Island. The island was subsequently called Isle Bienville for a short time before reverting back to Horn Island.

Horn Island was home to a family who lived there from 1845 to 1920 raising cattle. A lighthouse near the eastern tip of Horn Island was carried away, along with the keeper and his family, in the hurricane of 1906. In 1943, as part of the war effort during World War II, the U.S. Army built a biological weapons testing site with barracks, corral station, and administration facilities in the central portion of the island. An incinerator was connected at some distance to the west via a connecting narrow gauge railroad. In 1958, the majority of Horn Island was transferred to the U.S. Fish and Wildlife Service, to be managed as part of the Breton National Wildlife Refuge. (Some tracts on the island remained in private ownership at that time.) The island was transferred once again in 1971, this time to the National Park Service for inclusion in the Gulf Islands National Seashore.

Petit Bois Island was not noted on early maps, most likely because it was still a part of Dauphin Island. A narrow, barrier spit-like connection between Petit Bois and Dauphin was permanently severed less than three centuries ago. Maps from the nineteenth and twentieth centuries show Petit Bois gradually migrating westward into its present position. Petit Bois, meaning “small woods,” was named for the small stand of pine forest it supports on the eastern end, which has since been devastated by hurricanes. Breton National Wildlife Refuge included about half of Petit Bois Island and the rest was owned by a corporation. It became part of the national seashore at the same time as Horn Island.



During the two decades following World War II,a dramatic increase in the number of small boats on the Gulf Coast increasedg development pressures on the barrier islands. Advocates rose in favor of designating the Horn and Petit Bois Islands as wilderness, affording it the highest level of permanent protection.

This narrative describes the four tangible and measurable qualities of wilderness character that collectively define the Gulf Islands Wilderness: (1) natural, (2) untrammeled, (3) undeveloped, and (4) opportunities for solitude or primitive and unconfined recreation. Understanding and accurately describing the qualities of wilderness character at Gulf Islands provides a basis from which informed decisions concerning park planning, monitoring, management, and stewardship can be made.

Natural Quality

Definition: Wilderness maintains ecological systems that are substantially free from the effects of modern civilization.

On the horizon, intermittent tall evergreen pine trees first catch the eye as visitors approach the distant and alluring Gulf Islands Wilderness. The wilderness islands emerge out of emerald green waters. The sugar white sands, at times squeaking underfoot, are unique to the islands and set them apart from the artificial beaches of the mainland. Here, natural processes and change are constant. This dynamic natural environment is characterized by an intricate interplay between land, water, and atmosphere.

Warm temperatures and high humidity reign over the islands, but the Gulf of Mexico provides some relief from the overbearing summer heat and mitigates seasonal extremes. Although the traditional signs of changing seasons are not as evident on these islands, the seasons can be experienced by a keen eye observing the feel of the air, life cycles of species, and color variations of the sky.

Diverse life on these islands have specialized and adapted to withstand the dynamic and harsh conditions. Salt regulates the type and abundance of plant life that can flourish. The elaborate stem and root system of the salt-tolerant sea oat protects and stabilizes the island, acting as its backbone. Some shrubs and trees are sculpted by the salt spray, never growing higher than the primary dune that shields them. Back in the interior, freshwater collects in marshes among old dunes and supplies trees with fresh water. Over time as the islands migrate and morph, tree stumps are left behind protruding from the edge of the surf.

The wilderness islands represent a timeless, free and fascinating world with dark forests, rolling dunes reaching heights of 20–40 feet, and distinctive lagoons, freshwater marshes, and brackish ponds all teeming with life. Ospreys plunge into the water to catch a fish or wheel about their conspicuous treetop nests. Sensitive species, such as the American bald eagle, least tern, snowy plover, piping plover, and several sea turtle species use the wide beaches and productive mud flat as valuable resting and nesting habitats.



In the winter, the entire area is a haven for many species of ducks and other water birds. Other species, such as Monarch Butterflies, are transient visitors resting on the island during their spring and fall migrations across the Gulf of Mexico. Tidal marshes are highly productive biological systems and provide habitat for a variety of reptiles, birds, and insects and are the nursery grounds for various finfish and invertebrates. All are part of this intricately connected tapestry of the wilderness islands.

The natural quality of wilderness character is degraded by the presence of nonnative plant and animal species, as well as the presence of navigational channels that alter the natural littoral sediment transport. Although the national seashore treats invasive species, visitor boats, commercial fishing vessels, and large ships may provide an opportunity for unintentional introductions of new species that may have vast and far reaching impacts on many aspects of the natural system. In addition, ocean currents and storm events bring nonnative or invasive organisms to shore that may pose a threat to the native community.

Navigational channels interrupt the natural westward migration of the barrier island chain. The Pascagoula Shipping Channel abuts the western end of Petit Bois Island and was dredged and deepened as early as 1880. Dredging operations can permanently remove large volumes of sand from the littoral sediment transport system and arguably create a sediment sink effect. These sands would have otherwise nourished downdrift islands. Coordinated efforts to make sediment placement emulate natural processes are being pursued, but the wilderness island of Petit Bois Island is undeniably disappearing as it migrates west into the shipping channel.

The proximity of populated areas to the wilderness islands affects air and water quality, as well as other biophysical processes. The wilderness islands are classified as a Class II airshed under the Clean Air Act. Although a number of designated wilderness areas are classified as Class I airsheds, this air quality classification is the secondmost stringent and is designed to protect the majority of the country from air quality degradation.

Offshore oil platforms to the south make the islands susceptible to incidents like the 2010 BP Deepwater Horizon oil spill disaster that released 4.9 million barrels of oil into the Gulf of Mexico. Plumes of oil moved through the sea covering everything in their path including the frontline barrier islands. Miles of delicate habitat were coated in oil and hundreds of species were severely impacted, with long term effects to marine and terrestrial resources still undetermined.



Untrammeled

Definition: Wilderness is essentially unhindered and free from modern human control or manipulation. This quality represents the "wild" in "wilderness." Any intentional or unintentional, authorized or unauthorized treatment or action that manipulates the wilderness degrades this quality. Perpetuating the untrammeled quality requires managers to restrain themselves, rather than restraining the wilderness. Often, upholding the untrammeled quality can detract from another wilderness quality, such as "naturalness," or viceversa. For example, nonnative species may be removed in order to attain natural species composition, which would in turn be a manipulation of the current wilderness.

In Gulf Islands Wilderness, natural processes continue generally unhindered, without overt manipulation. The oceanic and meteorological forces shaping these dynamic ropes of sand are vast and powerful. The islands shelter the mainland coastal plain, absorbing the frontline of massive storm events even as they incur dramatic changes in their own size and form.

Episodic hurricane destruction and island segmentation has played a vital role in the evolution of the Mississippi-Alabama barrier islands and will continue to do so. At its peak, Hurricane Katrina (2005) completely submerged the entire barrier island chain, temporarily segmenting several islands and reducing their size. Less intense are the transitory waterspouts and squalls that roll through with chilled crisp air, high winds and rains causing unsuspecting visitors to seek refuge. Gulf Islands Wilderness exhibits a paradox of resilience and sensitivity, withstanding capricious weather events and yet being vulnerable to influences potentially compromising its ecological integrity.

The untrammeled quality of wilderness at Gulf Islands is preserved in several ways. Overall, preferred research methods in the wilderness involve nondestructive, noninvasive sampling. Likewise, many conditions are monitored on the island but not actively manipulated, such as observational field surveys of nesting shorebird species as opposed to employing more invasive practices. Visitors are educated about the presence of mosquitos and insects, rather than implementing measures to control those organisms to enhance recreational pursuits.





This quality of wilderness character is degraded by actions to manipulate the biophysical environment. One such action is targeted treating of invasive plant species of phragmites, popcorn tree, and cogon grass across much of the wilderness. Limited management actions addressing invasive wildlife species have been taken to control and eradicate nutria, an introduced rodent species, and eastern cottontail rabbit populations. These actions strive to minimize, and if possible eliminate, nonnative invasive species in order to maintain the ecological integrity of the wilderness. Although the conditions of the wilderness islands dampen the role of wildfire significantly, rare occurrences of human-caused fire from a campfire or natural lightning-caused fires do occur. Fire does not play an integral ecological function and therefore human-caused fires most likely would prompt a suppression response. Responses to naturally ignited fires are determined on a case-by-case basis.

In the late 1980s, the American bald eagle was reintroduced on Horn Island as the cornerstone to a larger regional Gulf Coast initiative. Horn Island was also used from 1989 to 1993 to prepare red wolves for reintroduction to the Alligator National Wildlife Refuge in North Carolina. In the past, actions have involved the banding of eagles, osprey, and migratory birds for the monitoring and protection of the species. Scientific activities conducted by external researchers within wilderness may involve manipulation of the biophysical environment, including sampling and banding of species. In wilderness living organisms follow the natural cycle of life and death, but. in cases of stranded marine life, dolphins and sea turtles are rescued in coordination with the local Institute for Marine Mammal Studies rehabilitation center.

The aftermath of destructive weather events or human-made disasters, such as Hurricane Katrina and the BP Deepwater Horizon oil spill, often prompt an emergency response that has varying effects on the untrammeled quality of wilderness. Incident responses may involve handling and/or banding wildlife, treating injured wildlife or removing carcasses, chemical application for hazardous materials, or other types of actions that manipulate the biophysical environment.

Maintenance of navigational channels for deep-draft shipping occurs outside the wilderness boundary but has a profound effect within wilderness. The U.S. Army Corps of Engineers possesses Congressional authority to maintain these channels, but they interrupt the natural westward migration of the wilderness islands and the barrier chain at large. The Pascagoula Shipping Channel navigates through Horn Island Pass and is dredged every 18 months. Conversations to minimize the impacts through placement of dredge spoils are ongoing.

Undeveloped

Definition: Wilderness retains its primeval character and influence, and is essentially without permanent improvements or modern human occupation.

The unencumbered landscape and intricacy of these wild, essentially undeveloped barrier islands distinguish the Gulf Islands Wilderness from most other similar locations and settings within the region. This contrast with the neighboring growing urban center and heavily developed coastline makes the wilderness islands shine like a beacon to those seeking not simply to look *at* nature but to experience nature from *within* wilderness. Biodiverse lagoons, freshwater ponds, wetlands, inlets, and maritime forests unfold from hidden locations within the rolling dunes and winding shoreline.

Unlike Petit Bois Island, which is entirely owned by the National Park Service, Horn Island contains inholdings of private property that could conceivably be developed at some point. These inholdings would transfer from potential to designated status once acquired. Horn Island has a seven-acre administrative corridor that was specifically carved out of the wilderness designation at the time of legislation for the management of the area; the existing development in this area has a substantial effect on the wilderness character of the island. In addition, the exclusion of this corridor from wilderness designation has allowed the placement of an Air National Guard communications tower, a highly visible structure, on the island. Development is concentrated in this nonwilderness corridor and the relative lack of development elsewhere on the wilderness islands is a commitment to the wilderness spirit and provides a cohesive wholeness to the wilderness island and reinforces it as a place unto itself.

Geographic isolation from the mainland has kept development at bay for much of the island's history. Minimal development in wilderness reinforces the need for personal preparedness with recognition that modern human use of the island is largely dependent on provisioning from the mainland. However, the large numbers of motorized vessels in the area and the relatively short travel time to the islands has shown a trend towards superfluous equipment and less of an emphasis on self-sufficiency.

The landscape of the wilderness islands allows for free exploration, but inherent natural attributes, such as murky lagoons, dense vegetation, and biting mosquitos, often influence travel patterns. Two recognized trails on Horn Island, one within the nonwilderness exclusion, serve both administrative and recreational purposes and largely follow natural contours that accommodate overland travel. Plastic grids underlie these trails from a previous attempt to stabilize them, but due to shifting sands the grids are being removed as they are uncovered over time. Such actions serve to enhance the undeveloped quality of wilderness character by the removal of unnecessary improvements.

The undeveloped quality is degraded by the presence of some installations and structures. Structures in designated wilderness on Petit Bois Island include a U.S. Coast Guard operated weather station and navigational structures and remnant foundation materials with undetermined origins. On Horn Island, structures associated with a U.S. Army chemical weapons testing facility established during World War II are presentt in both wilderness and nonwilderness. Remnants of laboratory and incinerator facilities, as well as a buried narrow gauge railroad, are present in wilderness. The site of the former living quarters for this facility is outside wilderness. (The currently exisiting facilities constructed after 1978 by the National Park Service are located at this site and are used for administrative purposes.) Scientific instrumentations exist within wilderness on a temporary basis and are mostly used by external researchers. Resource protection signs and flags are posted to protect osprey and shorebird species during the nesting season. Closure signs have been placed around the chemical weapons testing facility for risk of exposure to hazardous material.

Opportunities for Solitude or Primitive and Unconfined Recreation

Definition: Wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation. This quality is primarily about the opportunity for people to experience wilderness, and is influenced by settings that affect these opportunities.

Wilderness provides opportunities for exploration, challenge, and freedom from societal or managerial controls. An emphasis on primitive wilderness reinforces the connection to our ancestors and our American heritage. Together, primitive and unconfined recreation provide ideal opportunities for the physical and mental challenges associated with adventure, real consequences for mistakes, and personal growth that result from facing and overcoming obstacles.

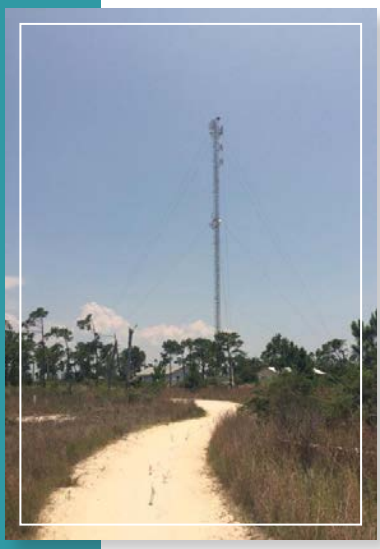
The great lengths of deserted sands and the adventures looming in the interior of the island provide opportunities for self-discovery and connection with the environment. The journey leaving the populated shores of the mainland and arriving on the shores of wilderness is a transformative experience. The journey allows for the discovery of a refuge, as a place to not look at nature but to immerse one's self in the natural rhythms of the island and its denizens. It is this contrast that amplifies their value, and has made the unique primeval quality of Gulf Islands Wilderness an oasis for solitude. Opportunities for solitude or primitive and unconfined recreation exist from the early rays of light to the dark night skies studded with stars.

A sense of timelessness pervades the wilderness, a place—and, more so, a state of mind— that is both expansive and intimate. A view of the island provides solace in its primeval character. One can stand on the shore of wilderness and contemplate the ebb and flow of the Gulf of Mexico waters. The scale of the island is big enough to find escape yet small enough to know and to understand. The surface topography of ridges and valleys covered in lush vegetation allows for an infinite number of niches to call your own for a short time. This wild landscape also provides the space to deepen relationships with travel companions through shared experiences and awe-inspiring vistas.

The Mississippi Sound separates the islands from mainland civilization, and night skies are blanketed with the relatively unimpeded dance of the moon and stars. On the mainland side especially, however, ambient human generated light is a threat to an experience that is intimately tied with that of wilderness. Soundscapes are typically dominated by the sounds of nature and the absence of most air pollutants allows people to breathe deeply, sleep soundly, and smell the earth.



Gulf Islands Wilderness is predominantly accessed by motorized watercraft, but once ashore visitors must rely on primitive modes of travel. Thus the pace of the journey is much slower than what most people experience in modern life, providing a valuable opportunity to tune in to the natural environment and engage a variety of primitive recreational pursuits. The absence of recreational facilities, such as wilderness campsites, pit toilets, or shelters, encourages self-reliance and sense of discovery; however, an unquantified potential of improper human waste disposal and related activities affect wildlife, vegetation, and dune habitat, as well as wilderness character.



Opportunities for solitude or primitive and unconfined recreation are degraded by the sheer number of visitors and their concentration of boats in waters adjacent to the island tips and sheltered coves. Though opportunities for solitude are widely available, they are undoubtedly tempered by the unavoidable geographic confines of the island and its finite ability to absorb the presence of people. Even the presence of people and motorboats immediately outside of wilderness has a profoundly diminishing effect on natural sights and sounds for visitors seeking solitude inside wilderness. Dense accumulations of visitors seeking a social, beach atmosphere occur along parts of the shoreline during the long recreational season, causing adverse impacts to wilderness character, including opportunities for solitude. These congregations and their impacts on the biophysical resources, as well as on each other, need to be carefully managed. In the context of the finiteness of the island wilderness, these attributes that are most valued are increasingly becoming diminished.

A number of visual intrusions existing inside and outside wilderness degrade the wilderness viewscape. The buildings and related equipment of the nonwilderness administrative compound on Horn Island, including in particular the Air National Guard communications tower, can be observed or heard from many points on the island. On Petit Bois Island, the U.S. Coast Guard operated weather station and navigational structures likewise diminish the viewshed.

Further outside the national seashore's boundary, commercial fishing vessels and massive cargo and military ships are a common sight and sound as they navigate around and between islands. Low-flying military overflights have been a persistent issue. Sights and sounds of the densely developed mainland coast, including Pascagoula shipyard, Chevron refinery and Biloxi casinos, decrease the experience of remoteness from modernization. These sources, as well as offshore oil platforms in the gulf, are sources of light pollution eroding the celestial views of the night sky.

Marine debris and trash, ranging in size from plastic bottles to vessels to aids to navigation (ATON), litter the shore and continue to wash ashore. Many times maritime endeavors have resulted in vessel groundings, often left abandoned as marine debris. Potential sources of trash and debris include but are not limited to the mainland coast, oil and gas platforms, ships and vessels, and the far shores of neighboring states and countries. Extremely large debris is extremely difficult to remove and may persist for long periods of time.

Issues for Wilderness Planning

Please see the discussion of key park issues in the "Identification of Key Issues and Associated Planning and Data Needs" in the foundation document. The foundation document includes a detailed assessment of planning and data needs prepared by the NPS Southeast Region and Gulf Islands National Seashore, a number of which pertain to the Gulf Islands Wilderness.

Southeast Region Foundation Document Recommendation
Gulf Islands National Seashore

July 2016

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Southeast Regional Director.

RECOMMENDED
Daniel R. Brown, Superintendent, Gulf Islands National Seashore **Date**

APPROVED
Stan Austin, Regional Director, Southeast Region **Date**

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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July 2016

Foundation Document • Gulf Islands National Seashore



NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR