



# Foundation Document Cumberland Island National Seashore

Georgia

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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 401 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 in order 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 is to have a foundational document that will provide basic guidance for planning and management decisions—a foundation for planning and management, or foundation document. 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 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. Preparing this foundation document was a collaborative effort among NPS staff from Cumberland Island National Seashore, the NPS Southeast Regional Office, the NPS Denver Service Center, and other NPS programs, as well as using public feedback. A complete list of preparers and contributors is included in part 3 of this document.

This foundation document was developed using public input. In December 2012 and January 2013, the National Park Service asked the public to provide feedback on the importance of Cumberland Island National Seashore, and to provide input concerning the threats to and/or opportunities for visitor experiences, recreation, and resource protection. Comments were collected using comment cards, the NPS park planning website, and by holding a public open house at the park visitor center on January 28, 2013, where NPS staff recorded public feedback in person. The National Park Service announced the foundation process and invited public input using local and regional news media in a series of press releases. All public feedback received was summarized in a public comment report used in the foundation workshop held on January 29, 30, and February 1, 2013, on Cumberland Island. This foundation document reflects the thoughts and ideas shared during this public involvement process.

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 Cumberland Island 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

Cumberland Island National Seashore is the largest and southernmost of Georgia's barrier islands. Located 1–3 miles off the mainland coast, the island is bounded by the Cumberland River on the west, by St. Andrew's Sound on the north, the Atlantic Ocean on the east, and by Cumberland Sound on the south. The island is 17.5 miles long, ranging from approximately a 0.5 mile to 3 miles wide, and totals 36,415 acres of which 16,850 are marsh, mud flats, and tidal creeks. The northern portion includes 9,886 acres of designated wilderness, while an additional 10,500 acres are classified as potential wilderness. Most of the island's uplands are federally owned and managed by the National Park Service. The remaining portions of the island are state owned, privately owned, or owned by other federal entities.

Cumberland Island is an exceptionally dynamic natural environment, reflecting constant transformation by water, wind, and fire. Although the entire island has been altered by people for thousands of years, the dominant force of change in this environment is the ocean, with littoral currents, wave and tidal activity, storm surges, and periods of sea level fluctuation continually acting to accrete and erode the shoreline.

The national seashore has the greatest diversity of habitats and biotic communities of any of Georgia's coastal islands. Extensive *Spartina* marshes and tidal creeks cover the western shoreline, providing highly productive estuarine nursery and feeding grounds for juvenile fish, shrimp, crabs, and other invertebrates. Upland forest communities comprise a large portion of the island. Oak and pine dominate most mature forests and saw palmetto is a common understory plant. Additionally, the island has a sizeable acreage of scrub/shrub habitat supporting a variety of unique plant species. Surface aquatic systems are extensive and include freshwater lakes, ponds, and sloughs with highly fluctuating water levels. Dune communities extend the length of the eastern shoreline and are primarily composed of sparse stands of grasses, forbs, and sedges. On the north end of the island rear dunes reach up to 45 feet in elevation. Human-dominated habitats consisting of isolated residences and historic landscapes make up a small percent of the island's area.



The aquatic and terrestrial fauna of the island are diverse. More than 300 bird species use the seashore at various times of the year, and more than 100 species are known to nest there. Bird species that use the seashore at various times of the year include the bald eagle, federally listed piping plover, and wood stork. The island provides habitat for a variety of mammals including the white-tailed deer, raccoon, river otter, and bobcat. More than 50 species of herpetofauna are present. American alligators are abundant, and the nesting population of the federally threatened loggerhead sea turtle is the most significant along the Georgia coast. Feral populations of hogs and horses roam freely on the island, and while Cumberland Island National Seashore has established the objective of eradicating the hog population, feral horses currently are not managed. Permitted hunts are conducted annually for white-tailed deer and feral hogs.

For more than 4,000 years human visitors and residents have interacted with and relied on the natural resources of Cumberland Island. Numerous shell middens throughout the island provide the most conspicuous clues to a complex American Indian population that once prospered here. Soon after European contact, Cumberland Island's abundance of natural resources attracted mariners who stopped to load game birds, pelts, and naval stores. From the late 1500s and well into the mid-1600s, Spanish missionaries and soldiers established a string of missions and related forts on the Georgia sea islands, including the missions of San Pedro de Mocama and San Pedro y San Pablo de Porturiba on Cumberland Island. Spanish and English colonial aspirations came into conflict along the Georgia coast in the mid-1700s and the English fortified Cumberland Island with construction of Fort St. Andrews at the north end of the island and Fort Prince William at the southern end.

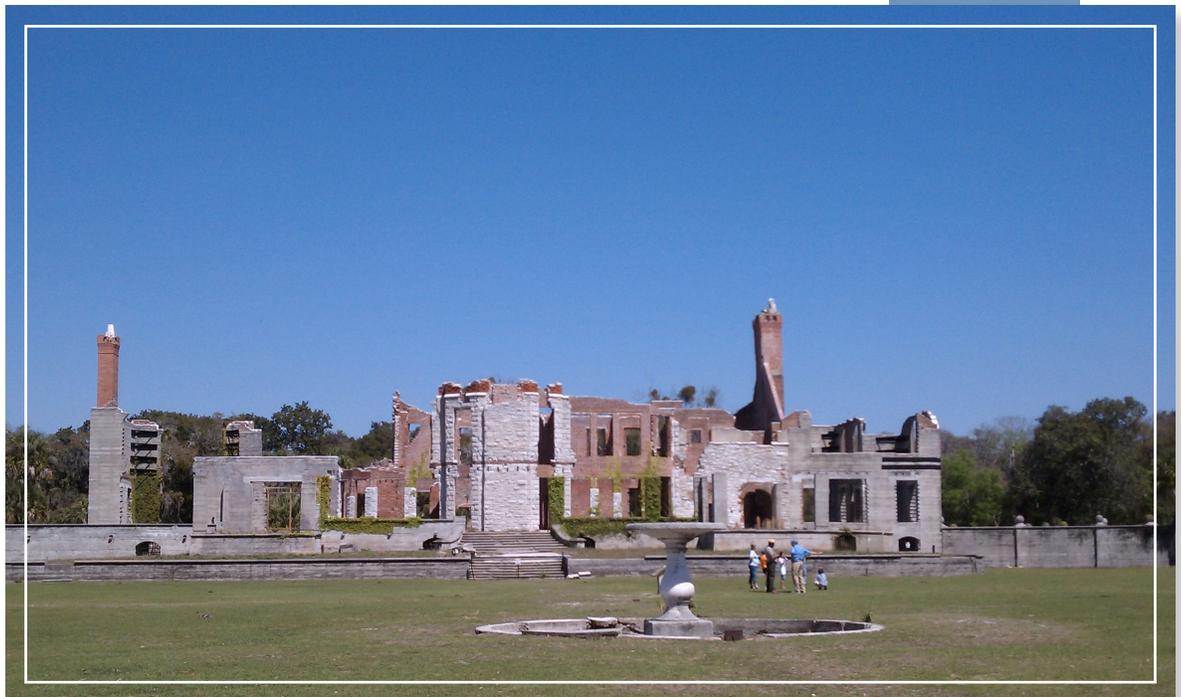
By the late 1700s, the plantation system based on enslaved Africans and the production of staple crops for export took root on Cumberland Island. Seeking to establish a timber enterprise, General Nathaneal Greene and his wife Catherine were among the first landowners on Cumberland Island after the American Revolution. After Greene's death in 1789, Catherine and her second husband, Phineas Miller, began to cultivate various crops and sold live oak lumber to the emerging United States to build the first ships of the U.S. Navy. Although timber, citrus fruit, and olives were cultivated, sea island cotton emerged as the most profitable crop during the island's period of agricultural production. By the 1840s, the white population on the island was probably never greater than 60, while the number of enslaved Africans increased from about 200 in 1835 to 455 in 1850 as a result of increased cotton production. By 1860 there were approximately 13 plantations on the island.



With the end of the Civil War Cumberland Island's plantation economy was finished and the era of recreation began in the 1880s with the establishment of the High Point hotel at the northern end of the island. Development also included the creation of the Settlement community (also known as Half Moon Bluff) where several African American families lived while staffing the island hotels and estates. The Candler family of Atlanta acquired the High Point hotel as a retreat. Starting in 1881, the northern industrialist Thomas Carnegie, and later his wife Lucy, began acquiring most of Cumberland Island to establish winter estates, including Dungeness, Plum Orchard Mansion, and other properties. The remnants of their development on Cumberland Island left behind the most extensive cultural resources. A trust kept the Carnegie family's land holdings intact until 1962. In 1972, Carnegie family members, government officials, environmental organizations, and the National Park Service worked together to set aside Cumberland Island as a national seashore and unit of the national park system. The appearance of Cumberland Island today is in part a result of the overlay of these successive waves of human habitation and development. At the same time, Congress' designation of wilderness in 1984 ensured that Cumberland Island's dynamic natural processes would dominate the landscape and that the island's largely undeveloped character would continue into the future.

For a more in-depth history of the park, please refer to *Cumberland Island National Seashore: A History of Conservation Conflict*, by Larry M. Dilsaver (2004) and *Cumberland Island: A History*, by Mary Bullard (2005).

Cumberland Island is approximately seven miles by boat from St. Marys, Georgia, and can only be reached by water transportation. Island visitation is serviced by a ferry that runs from the St. Marys visitor center to docks at Dungeness and Sea Camp on the island. The park's general management plan limits visitation to approximately 300 people a day. Recreational opportunities at Cumberland Island include walking and hiking, camping, beachcombing, swimming, wildlife viewing, seeking solitude, and visiting the park's historic sites. The park also offers a daily guided van tour, called "Lands and Legacies Tour," to take visitors to Plum Orchard, The Settlement, Cumberland Wharf, and areas along the island's main road.

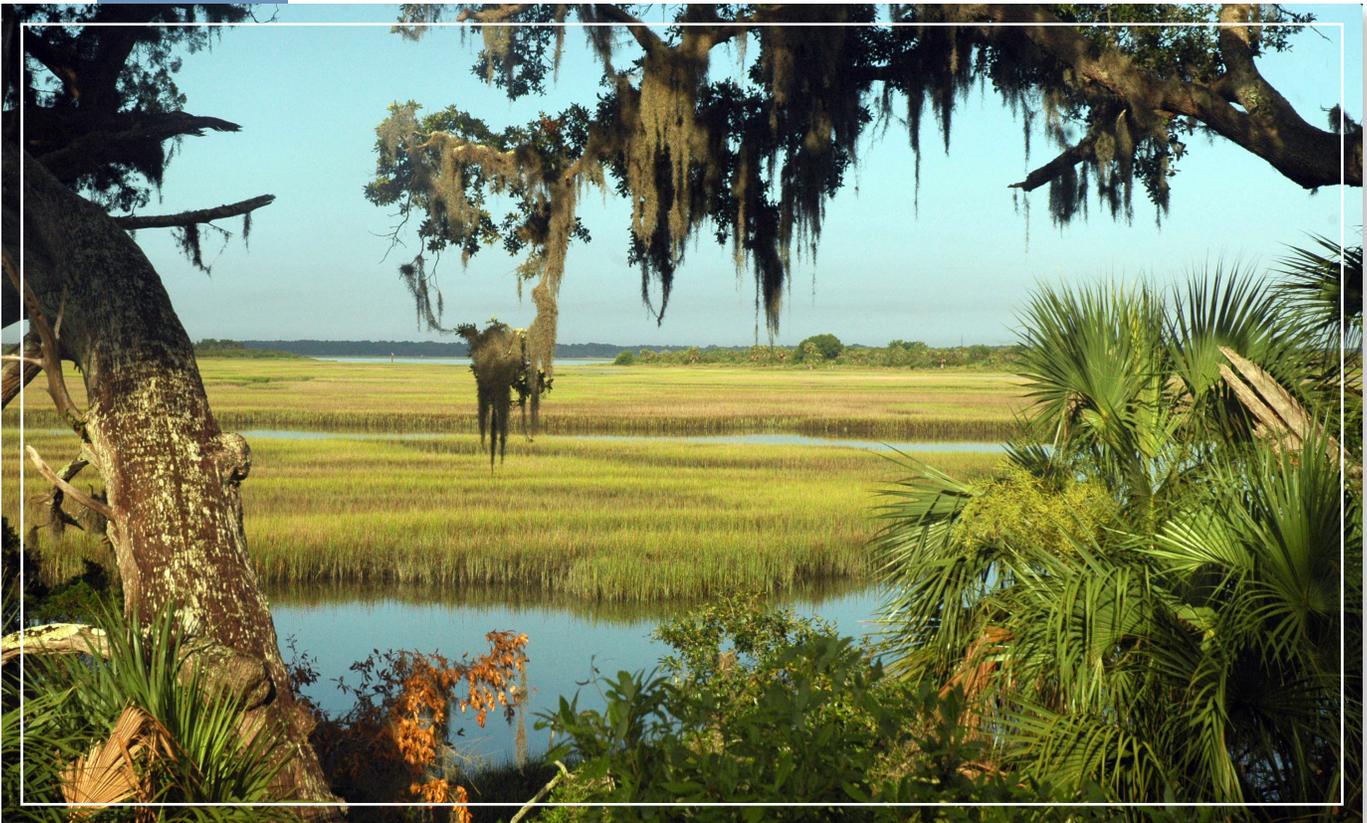


## Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Cumberland Island National Seashore was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established on October 23, 1972, when the enabling legislation adopted by Congress was passed and signed into law (see appendix A for enabling legislation and subsequent amendments). The purpose statement lays the foundation for understanding what is most important about the park.

The purpose statement for Cumberland Island National Seashore is:

*CUMBERLAND ISLAND NATIONAL SEASHORE maintains the primitive, undeveloped character of one of the largest and most ecologically diverse barrier islands on the Atlantic coast, while preserving scenic, scientific, and historical values and providing outstanding opportunities for outdoor recreation and solitude.*



## 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 Cumberland Island 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 Cumberland Island National Seashore. (Please note that the sequence of the statements do not reflect the level of significance.)

1. Cumberland Island National Seashore is one of the Atlantic Coast's most ecologically diverse barrier islands, where local variations in environmental conditions create extensive and unique communities across the island; from the beach and dune system on the east, through the interdune, freshwater wetland, and upland forest habitats in the interior, to the salt marsh on the west.
2. Cumberland Island National Seashore contains a rich concentration of cultural resources that recount 4,000 years of human habitation and include a remarkable diversity of ethnic and social backgrounds. These pieces of the past—archeological features, landscapes, architecture, artifact collections, people—cast a compelling backdrop to the island that draws visitors into the stories of this remote place.
3. With almost 18 miles of pristine beach and one of the largest oak maritime forests remaining in the United States, Cumberland Island provides an unparalleled visitor experience.
4. Cumberland Island National Seashore protects the largest designated wilderness area on an East Coast barrier island.
5. Cumberland Island National Seashore's physical isolation provides visitors opportunities to experience outdoor recreation in an uncrowded, undeveloped setting. Moreover, this isolation helps to preserve and protect the island's fragile natural and cultural resources.



## 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 Cumberland Island National Seashore:

- National register archeological districts and other significant archeological resources.** Cumberland Island’s two archeological districts in the National Register of Historic Places (NRHP) are Table Point and Rayfield, which contain significant artifacts and features from American Indian and enslaved African communities respectively. There are other archeological resources on the island that reflect its 4,000 years of human culture and reveal stories that include American Indian life, Spanish missions, colonial fortresses, agricultural plantations, military occupation, enslaved Africans, vacation retreats, African American communities, remote lifestyles, maritime endeavors, and grand estates. Some of these sites are listed in the national register as features of the island’s historic districts.
- National register historic districts and their contributing features.** Cumberland Island National Seashore’s four national register historic districts—Dungeness, Stafford Plantation, Plum Orchard, and High Point-Half Moon Bluff—highlight the cultural landscapes, historic structures, artifact collections, archeological sites, and other features associated with their respective historic and prehistoric cultures. They are significant with respect to archeology, architecture, community planning, agriculture, landscape architecture, leisure/resorts, religion, and/or social/humanitarian history.



- **Intact barrier island system driven by coastal geological and biological processes.** Cumberland Island National Seashore is largely undeveloped and, although it had been affected by human endeavors in the past, natural forces now prevail. The length and breadth of the island allow numerous diverse habitats to prosper, which in turn give critical refuge to a magnificent variety of plant and animal species. This rich environment and natural character make Cumberland Island unique among coastal barrier islands.
- **Live oak maritime forests.** The oak maritime forest is dominated by the live oak *Quercus virginiana* and the sprawling, arching trees are enhanced by Spanish moss, ferns, mosses, and a thick palmetto understory. This distinctive forest community has an aesthetic charm that many visitors associate with Cumberland Island. It also provides excellent habitat for a variety of plant and animal species.
- **Pristine beach (scenic).** The pristine beach is of great importance to Cumberland Island as a national seashore and is exceptional because public access to undeveloped, uncrowded, pristine beaches is increasingly rare. There are very few areas in the United States where beaches remain undeveloped; with more than half of the nation's population living near coastal areas, it is vital to preserve such a cherished yet vulnerable resource.
- **Wilderness.** Taking into account both designated and potential wilderness, the Cumberland Island Wilderness encompasses more than half of the island's land mass and is exceptionally large for a barrier island. Its deep, lush forest and untamed atmosphere offer outstanding opportunities for solitude and inspired recreation. Low visitation helps maintain these qualities.
- **Primitive and undeveloped character.** The legislation establishing Cumberland Island National Seashore mandates that, with the exception of areas deemed especially adaptable for recreational uses, the seashore shall be permanently preserved in its primitive state, and no development for the convenience of visitors shall be undertaken that would be incompatible with the preservation of the prevailing unique flora and fauna or the physiographic conditions. In keeping with this directive, development within the national seashore has been minimal since establishment and natural processes have been allowed to dominate.
- **An uncrowded setting that provides opportunities for both passive and active outdoor recreation.**

The uncrowded setting is important because it allows visitors to have opportunities for passive and active recreation. The absence of crowds and overwhelming development provides opportunities for solitude and exploration. The island's beaches, flora, fauna, trails, and surrounding waters, as well its cultural sites, present opportunities for a broad array of interests and recreational pursuits.



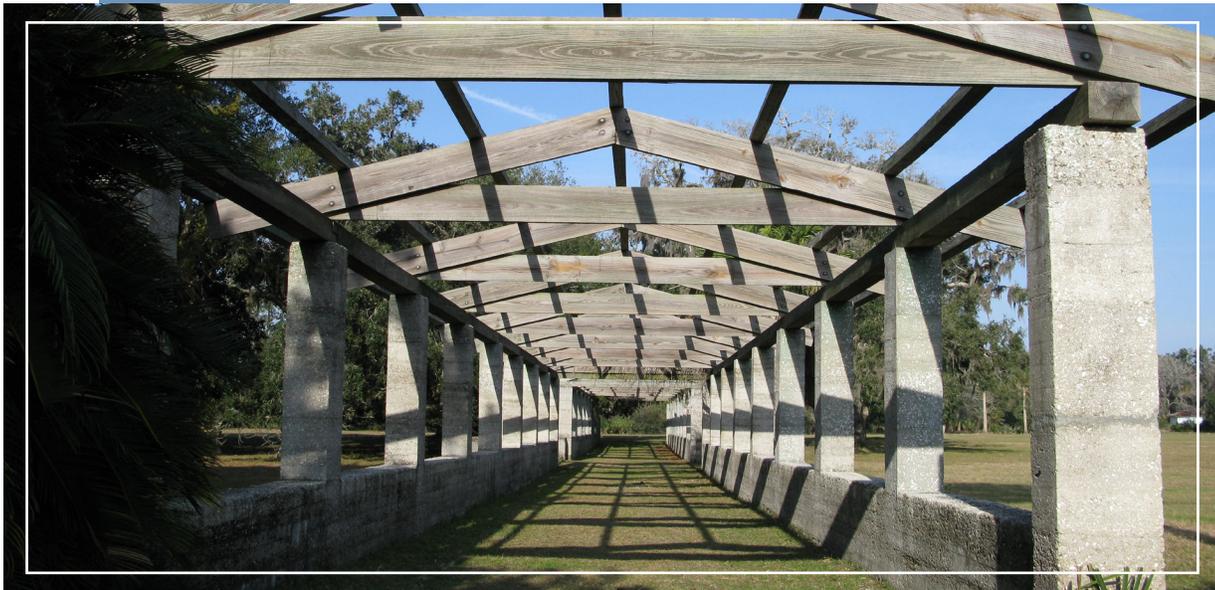
## Interpretive Themes

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 of the 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. They go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. Themes help to 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 Cumberland Island National Seashore:

- For 4,000 years, Cumberland Island’s landscapes and resources have attracted varied human groups, each of whom have shaped and influenced the island in different ways, leaving behind a complex array of historical and cultural legacies.
- Being an island of contrast that is both accessible and remote, and wild and manipulated; the seashore is one of the largest remaining intact barrier ecosystems on the east coast supporting a variety of fragile yet vibrant plant and animal communities that are always under siege from outside forces.
- Cumberland Island is a modern-day sanctuary for those seeking solitude, reflection, recreation, and inspiration.
- Since designation in 1972, the National Park Service has provided a vision for Cumberland Island National Seashore to preserve resources and serve the public while struggling to balance desires of various interest groups.



## 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 of the 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 memoranda 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 Cumberland Island National Seashore.

For more information about the existing special mandates and administrative commitments for Cumberland Island National Seashore, please see appendix B.

### 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 and value analysis table includes current condition, 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	National register archeological districts and other potentially significant archeological resources
<p><b>Relationship to Significance Statements</b></p>	<p>Cumberland Island National Seashore contains a rich concentration of cultural resources that recount 4,000 years of human habitation and include a remarkable diversity of ethnic and social backgrounds. These pieces of the past—archeological features, landscapes, architecture, artifact collections, people—cast a compelling backdrop to the island that draws visitors into the stories of this remote place.</p>
<p><b>Current Conditions and Trends</b></p>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• The park has more than 60 known archeological sites.</li> <li>• Rayfield Archeological District and Table Point Archeological District are listed in the National Register of Historic Places.</li> <li>• Other archeological sites are in the National Register of Historic Places as contributing features for the island’s four listed historic districts.</li> <li>• Additional sites may be eligible for listing in the National Register of Historic Places.</li> <li>• Site conditions range from poor to good depending on the site and location.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Shoreline sites’ conditions continue to deteriorate with erosion and unauthorized collecting.</li> </ul>
<p><b>Threats and Opportunities</b></p>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Erosion, particularly to back-barrier sites from natural and anthropogenic forces.</li> <li>• Climate change effects such as increase in frequency and intensity of storms and sea-level rise are likely to cause more shoreline erosion and loss of archeological resources.</li> <li>• The National Park Service does not have direct management control of all sites.</li> <li>• Unauthorized collectors and looting.</li> <li>• Visitor use impacts, such as trampling by foot traffic and boat wakes.</li> <li>• Rooting and trampling by feral animals.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Data and artifact recovery by professional archeologists before the sites are lost forever to erosion or other imminent threats.</li> <li>• Investigations and field tests to determine if the restoration of intertidal oyster beds will help deter bank erosion.</li> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives to include fundraising and volunteer assistance.</li> </ul>

Fundamental Resource or Value	National register archeological districts and other potentially significant archeological resources
<p><b>Identified Data Needs</b></p>	<ul style="list-style-type: none"> <li>• Update historic resource study.</li> <li>• Update assessment of archeological and historic resources.</li> <li>• Individual site investigations to define characteristics, significance, and boundaries.</li> <li>• Update the 1984 National Register of Historic Places multiple resource submission nomination forms.</li> <li>• Determination of NRHP eligibility is needed for numerous archeological sites.</li> <li>• Artifact and data recovery is needed at sites where erosion threatens the integrity and the loss of resources is a virtual certainty.</li> <li>• Complete comprehensive archeological investigation of the San Pedro de Mocama site, one of the most significant and vulnerable archeological sites on the island.</li> <li>• Data on visitor carrying capacity for island's natural and cultural resources.</li> <li>• Scope of collections.</li> <li>• Feral horse study to comprehensively quantify damages and impacts specifically on Cumberland Island, on both natural and cultural resources.</li> <li>• Erosion analysis: data collection and analysis to determine contributing factors to back-barrier erosion and development of management alternatives to contend with the problem and/or its effects.</li> </ul>
<p><b>Identified Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Resource stewardship strategy.</li> <li>• Shoreline management plan.</li> <li>• Feral horse management plan.</li> </ul>
<p><b>Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV</b></p>	<ul style="list-style-type: none"> <li>• <i>Cumberland Island National Seashore: Assessment of Archeological and Historical Resources</i> (John Ehrenhard, 1976).</li> <li>• <i>Historic Resource Study: Cumberland Island National Seashore, Georgia</i> (Louis Torres, 1977).</li> <li>• Final reports and trip reports from Southeast Archeological Center site investigations on Cumberland Island.</li> <li>• <i>Cumberland Island National Seashore Resource Management Plan</i> (1994).</li> </ul>



Fundamental Resource or Value	National register archeological districts and other potentially significant archeological resources
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• American Antiquities Act of 1906</li> <li>• Archeological and Historic Preservation Act of 1974</li> <li>• Protection of Archeological Resources (43 CFR 7)</li> <li>• National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>• Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>• Archaeological Resources Protection Act</li> <li>• Native American Graves Protection and Repatriation Act</li> <li>• 36 CFR 79 – Curation of Federally-owned and Administered Archaeological Collections</li> <li>• <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i></li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006</li> <li>• NPS Director's Order 28: <i>Cultural Resource Management</i> (1998)</li> <li>• NPS Director's Order 28A: <i>Archeology</i> (2004)</li> </ul>



Fundamental Resource or Value	National register historic districts and their contributing features
Relationship to Significance Statements	<p>Cumberland Island National Seashore contains a rich concentration of cultural resources that recount 4,000 years of human habitation and include a remarkable diversity of ethnic and social backgrounds. These pieces of the past—archeological features, landscapes, architecture, artifact collections, people—cast a compelling backdrop to the island that draws visitors into the stories of this remote place.</p>
Current Conditions and Trends	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Dungeness Historic District <ul style="list-style-type: none"> <li>• 37 features on the List of Classified Structures (LCS).</li> <li>• Entire district and contributing features are under direct NPS management.</li> <li>• Structure conditions, which include ruins and foundations, range from poor to good.</li> <li>• Some buildings have been adapted for park operations and housing.</li> <li>• A primary visitor destination on the island.</li> </ul> </li> <li>• Stafford Plantation Historic District <ul style="list-style-type: none"> <li>• 13 features on the List of Classified Structures.</li> <li>• All LCS structures are on retained rights properties with limited NPS management.</li> <li>• Structure conditions, which include ruins and foundations, range from poor to good.</li> </ul> </li> <li>• Plum Orchard Historic District <ul style="list-style-type: none"> <li>• 16 features on the List of Classified Structures.</li> <li>• 11 LCS structures are on retained rights properties with no NPS management.</li> <li>• Structure conditions, which include ruins and foundations, range from poor to good.</li> <li>• Plum Orchard Mansion and grounds are open for daily guided tours.</li> </ul> </li> <li>• High Point - Half Moon Bluff Historic District <ul style="list-style-type: none"> <li>• 6 features on the List of Classified Structures.</li> <li>• 3 LCS structures are on retained rights properties with little NPS management.</li> <li>• Structure conditions range from poor to good.</li> <li>• Settlement area is open for daily guided tours.</li> <li>• Part of the "Lands and Legacies Tour."</li> </ul> </li> <li>• The Main Road (aka Grand Avenue) is also listed in the National Register of Historic Places.</li> <li>• The Tabby Cottage is listed as Nationally Significant, with all of the other structures listed at local, state, or contributing level of significance.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Dungeness: Recent repair/rehabilitation and maintenance work has helped stabilize structures as well as elements of the historic landscape.</li> <li>• Stafford Plantation: All structures are on retained rights properties but the National Park Service has done some repair/rehabilitation work. Stabilization of chimneys has been limited due to conflicting views on treatment.</li> <li>• Plum Orchard: Major exterior and interior restoration work was completed on the mansion during 2000–2007 timeframe.</li> <li>• High Point - Half Moon Bluff: Restoration work recently completed on Alberty House and Settlement grounds.</li> </ul>

<p><b>Fundamental Resource or Value</b></p>	<p><b>National register historic districts and their contributing features</b></p>
<p><b>Threats and Opportunities</b></p>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Harsh coastal environment, termites and other wood boring insects, and age accelerate deterioration of structures and other features.</li> <li>• Feral hogs and horses damage historic landscapes and structures.</li> <li>• At least 27 structures and portions of historic landscapes are under retained rights agreements, thus limiting the ability of the National Park Service to manage and maintain these structures in accordance with regulatory and policy standards, including section 106 of the National Historic Preservation Act.</li> <li>• High use and occupancy has the potential for damage and deterioration.</li> <li>• Vacant structures have the potential for neglect and decay.</li> <li>• Structural fire.</li> <li>• Climate change effects, such as an increase in frequency and intensity of storms and sea-level rise, are likely to cause more shoreline erosion and loss of cultural resources.</li> <li>• Wildland fire due to the close interface of historic features with the wildland environment.</li> <li>• Shoreline erosion.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Environmental and heritage education in Dungeness Historic District.</li> <li>• Potential partnerships to assist the park in serving visitors and protecting park resources.</li> <li>• Continue research to control insect infestation, working with the University of Georgia.</li> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives; to include fundraising and volunteer assistance.</li> <li>• Investigations and field tests to determine if the restoration of intertidal oyster beds will help deter bank erosion.</li> </ul>
<p><b>Identified Data Needs</b></p>	<ul style="list-style-type: none"> <li>• Update historic resource study.</li> <li>• Update and submit National Register of Historic Places nominations.</li> <li>• Update historic structure reports (existing historic structure reports are from the 1980s and are no longer accurate; historic structure reports for retained rights structures that will come to the National Park Service).</li> <li>• Determination of eligibility for outlying/overlooked structures including beach houses.</li> <li>• Assessment of associated museum collection in other repositories outside of Cumberland Island National Seashore.</li> <li>• Ethnographic assessment and overview for island.</li> <li>• Oral history (data from early 2000s pretty good, yet some data gaps).</li> <li>• Cultural landscape reports for High Point - Half Moon Bluff and Stafford Plantation.</li> <li>• Feral horse study to comprehensively quantify damages and impacts specifically on Cumberland Island, on both natural and cultural resources.</li> <li>• Data on visitor carrying capacity for island’s natural and cultural resources.</li> <li>• Scope of collections.</li> <li>• Air quality data.</li> <li>• Erosion analysis: data collection and analysis to determine contributing factors to back-barrier erosion and development of management alternatives to contend with the problem and/or its effects.</li> </ul>

Fundamental Resource or Value	National register historic districts and their contributing features
<p><b>Identified Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Resource stewardship strategy.</li> <li>• Long-range interpretive plan.</li> <li>• Historic structure adaptive reuse plans.</li> <li>• Parkwide ethnographic program strategy.</li> <li>• Sign plan for Dungeness.</li> <li>• Integrated pest management plan.</li> <li>• Facility use plan.</li> <li>• Shoreline management plan.</li> <li>• Feral horse management plan.</li> <li>• Exotic plant management plan.</li> </ul>
<p><b>Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV</b></p>	<ul style="list-style-type: none"> <li>• <i>Cumberland Island National Seashore: Assessment of Archeological and Historical Resources</i>, (John Ehrenhard, 1976).</li> <li>• <i>Historic Resource Study: Cumberland Island National Seashore, Georgia, 1977</i>, (Louis Torres, 1977).</li> <li>• Former reserved property management plan.</li> <li>• Historic structure reports available for many structures but are dated.</li> <li>• Plum Orchard historic structures report.</li> <li>• Historic American Building Surveys have been done for a number of structures.</li> <li>• NRHP nominations.</li> <li>• Dungeness cultural landscape report and inventories.</li> <li>• Plum Orchard cultural landscape report nearing completion.</li> <li>• The Grange historic structure report underway.</li> <li>• Architectural plans and blueprints.</li> <li>• Landscape study for Stafford Plantation.</li> <li>• Historic furnishings report.</li> <li>• List of Classified Structures.</li> <li>• <i>Cumberland Island National Seashore Resource Management Plan</i> (1994).</li> </ul>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>• Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>• Archaeological Resources Protection Act</li> <li>• National Historic Preservation Act</li> <li>• <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i></li> <li>• <i>The Secretary of the Interior's Standards for the Treatment of Historic Properties</i></li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS <i>Management Policies 2006</i></li> <li>• NPS Director's Order 28: <i>Cultural Resource Management</i> (1998)</li> <li>• NPS Director's Order 24: <i>NPS Museum Collections Management</i></li> </ul>

<b>Fundamental Resource or Value</b>	<b>Intact barrier island system driven by coastal geological and biological processes</b>
<b>Relationship to Significance Statements</b>	<p>Cumberland Island National Seashore is one of the Atlantic Coast's most ecologically diverse barrier islands, where local variations in environmental conditions create extensive and unique communities across the island; from the beach and dune system on the east, through the interdune, freshwater wetland, and upland forest habitats in the interior, to the salt marsh on the west.</p>
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Intact overall.</li> <li>• Nearly 18 miles of the most significant sea turtle nesting habitat in Georgia.</li> <li>• In general, excellent shorebird, wading bird, neotropical migrant, raptor, and waterfowl habitat.</li> <li>• Deteriorated nesting habitat for wading birds (wood storks, egret and heron species) due to long-term fire suppression and periodic prolonged droughts.</li> <li>• Fire adapted ecosystems have been degraded by fire suppression.</li> <li>• Significant freshwater wetland systems.</li> <li>• Marshes in good condition, although heavily grazed in some areas.</li> <li>• Areas of severe erosion on west side of island (back barrier).</li> <li>• Massive jetty on south end of island affects sand movement / coastal geomorphology.</li> <li>• Healthy populations of reptiles and amphibians.</li> <li>• Supports a variety of unique butterfly, moth, and bee species.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Sea turtle nesting is increasing.</li> <li>• Predation of sea turtle nests has been significantly reduced since 2001.</li> <li>• Feral hogs are currently at a manageable level.</li> <li>• Feral horse population is stable in numbers as revealed in annual census.</li> <li>• Shorebird nesting success is low due to predation by coyotes.</li> <li>• Erosion on the west side of the island (back barrier) continues unabated.</li> <li>• Habitat alteration has occurred due to fire suppression.</li> <li>• Adult red bay trees have been extirpated due to laurel wilt disease.</li> </ul>



<b>Fundamental Resource or Value</b>	<b>Intact barrier island system driven by coastal geological and biological processes</b>
<p><b>Threats and Opportunities</b></p>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Resurgence of feral hog populations if control efforts are curtailed or discontinued.</li> <li>• Increased sea turtle nest depredation rates if feral hog management and other nest predator management efforts are eliminated.</li> <li>• Environmental impacts of feral horses including grazing, trampling, and waste.</li> <li>• Perpetual occurrences of laurel wilt disease.</li> <li>• Nonnative plants.</li> <li>• Coyotes pose a threat to nesting sea turtles, shorebirds and other ground nesting birds, small and intermediate size mammals, and white-tailed deer fawn survival.</li> <li>• Development and increased private boat traffic.</li> <li>• Visitor use in sensitive areas.</li> <li>• Declining water quality.</li> <li>• Hazards posed to marine species by commercial and recreational fishing as well as by vessel strikes.</li> <li>• Marine invasive species.</li> <li>• Climate change and sea-level rise are projected to have significant effects on coastal areas due to inundation, higher air temperatures, and increased storm intensity. Habitat loss, altered structure of ecological communities, changes to phenological events, and changes in water quality are among the potential outcomes.</li> <li>• Heavy vegetative fuel loads and altered habitat due to fire suppression.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Proactive fire management plan will help improve ecosystem health.</li> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives to include fundraising and volunteer assistance.</li> <li>• Partnerships with other federal and state agencies and private organizations.</li> <li>• Restoration of wetland areas impacted by anthropogenic modifications.</li> <li>• Investigations and field tests to determine if the restoration of intertidal oyster beds will help deter bank erosion.</li> </ul>
<p><b>Identified Data Needs</b></p>	<ul style="list-style-type: none"> <li>• Completion of updated vegetation map by Inventory &amp; Monitoring Program.</li> <li>• Pre-settlement conditions for all ecosystems on the island to assist natural resources restoration and determine desired resource conditions.</li> <li>• Feral horse study to comprehensively quantify damages and impacts specifically on Cumberland Island, on both natural and cultural resources.</li> <li>• Monitoring of red bay conditions relative to laurel wilt disease and the effect of the disease on other species.</li> <li>• Erosion analysis: data collection and analysis to determine contributing factors to back-barrier erosion and development of management alternatives to contend with the problem and/or its effects.</li> <li>• Water quality data of freshwater systems.</li> <li>• Data on visitor carrying capacity for island’s natural and cultural resources.</li> <li>• Air quality data.</li> <li>• Monitor beach driving.</li> </ul>

<p><b>Fundamental Resource or Value</b></p>	<p><b>Intact barrier island system driven by coastal geological and biological processes</b></p>
<p><b>Identified Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Resource stewardship strategy.</li> <li>• Fire management plan—to be completed in 2014.</li> <li>• South end management plan – some data exist. The area is one of two critical habitats for shore birds on the island. Need a plan that reduces impact on bird populations and manatees, and that would address private and commercial boat traffic</li> <li>• Predator management plan.</li> <li>• Feral horse management plan.</li> <li>• Exotic plant management plan.</li> <li>• Shoreline management plan.</li> </ul>
<p><b>Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV</b></p>	<ul style="list-style-type: none"> <li>• <i>The Ecology of the Cumberland Island National Seashore, Camden County, Georgia</i>, Hillestad, et al., Georgia Marine Science Center, 1975.</li> <li>• <i>Geology as Applied to Land-Use Management on Cumberland Island, Georgia</i>; McLemore, et al, Georgia Department of Natural Resources, 1981.</li> <li>• <i>Assessment of Coastal Water Resources and Watershed Conditions at Cumberland Island National Seashore, Georgia</i>, (Alber, Meryll, Janice Flory, and Karen Payne, National Park Service, Fort Collins, Colorado, 2005).</li> <li>• <i>Regional water quality synthesis for southeast coastal parks</i>, (Parman, J.N., J. Petrzelka, and M. Williams, National Park Service, Fort Collins, Colorado, 2012).</li> <li>• National Oceanic and Atmospheric Administration (NOAA) U.S. Climate Reference Network station data, December 2004 to present.</li> <li>• Nine basic inventories completed or underway through the Inventory &amp; Monitoring Program.</li> <li>• Inventory &amp; Monitoring Program vital signs monitoring.</li> <li>• Sea turtle nest monitoring data 1974 to present.</li> <li>• Annual horse census data 1991 to present supports an understanding of population trends for feral horse population.</li> <li>• Feral horse impacts on Cumberland Island – graduate study.</li> <li>• 2002 environmental assessment for hog management.</li> <li>• Mid-winter shorebird surveys.</li> <li>• Christmas bird count data.</li> <li>• Seabird Ecological Assessment Network surveys.</li> <li>• Piping plover surveys.</li> <li>• Technical reports, Cooperative Park Study Units.</li> <li>• Kings Bay Environmental Monitoring Program.</li> <li>• “Historical Back-barrier Shoreline Changes along Cumberland Island, Georgia, 1857–2002,” Chester W. Jackson, Jr.</li> <li>• <i>Presettlement Vegetation and Natural Fire Regimes of Cumberland Island National Seashore, Georgia</i>, (Frost, et al., 2011).</li> <li>• U.S. Geological Survey spatial and temporal assessment of back barrier erosion, ongoing.</li> <li>• Cumberland Island Exotic Plant Survey, Hunt and Langeland, 2004.</li> <li>• Numerous graduate thesis studies.</li> <li>• Cumberland Island feral hog management harvest records.</li> <li>• Multiple feral hog information outlets including Mississippi State University publications on feral hog control techniques; Jager Pro video documentation of feral hog control techniques; consultation with USDA APHIS Wildlife Services.</li> <li>• NPS research permit system’s investigator annual reports; scientific publications.</li> <li>• Data on visitor attitudes and support for invasive species management on Cumberland Island National Seashore (Sharp and Larson, 2012).</li> <li>• <i>Cumberland Island National Seashore Resource Management Plan</i> (1994).</li> </ul>

<p><b>Fundamental Resource or Value</b></p>	<p><b>Intact barrier island system driven by coastal geological and biological processes</b></p>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1972 (PL 92-583)</li> <li>• Georgia Shore Protection Act (O.C.G.A. 12-5-230 et seq.)</li> <li>• Georgia Coastal Marshlands Protection Act (O.C.G.A. 12-5-280 et seq.)</li> <li>• Endangered Species Act of 1973</li> <li>• The Clean Water Act</li> <li>• National Environmental Policy Act of 1969</li> <li>• The Clean Air Act</li> <li>• Executive Order 13112, "Invasive Species"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006</li> <li>• NPS Natural Resource Management Reference Manual 77</li> </ul>



<b>Fundamental Resource or Value</b>	<b>Live oak maritime forest</b>
<b>Relationship to Significance Statements</b>	<p>Cumberland Island National Seashore is one of the Atlantic Coast's most ecologically diverse barrier islands, where local variations in environmental conditions create extensive and unique communities across the island; from the beach and dune system on the east, through the interdune, freshwater wetland, and upland forest habitats in the interior, to the salt marsh on the west.</p> <p>With almost 18 miles of pristine beach and one of the largest oak maritime forests remaining in the United States, Cumberland Island provides an unparalleled visitor experience.</p> <p>Cumberland Island National Seashore protects the largest designated wilderness area on an East Coast barrier island.</p>
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• The forest is a second- and third-growth forest with some centuries-old witness trees remaining.</li> <li>• In good condition with the exception of significant loss of mid-canopy red bay trees due to laurel wilt disease.</li> <li>• The dominant canopy species is live oak (<i>Quercus virginiana</i>). The dominant understory species is saw palmetto (<i>Serenoa repens</i>).</li> <li>• "Although the pine timber has been logged [from this community], very little of the total area has ever been under cultivation. The community, except for small acreages, has not experienced intensive fire for 75–100 years or more" (Hillestad et al., 1975).</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Stable except for loss of red bay.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Adult red bay trees extirpated due to laurel wilt disease.</li> <li>• Feral hogs and horses impacting forest regeneration.</li> <li>• Invasive plants.</li> <li>• Heavy fire fuel loads within and adjacent to the live oak forest that may produce extreme fire behavior.</li> <li>• Severe tropical storms and hurricanes although the live oak has adapted to withstand hurricanes.</li> <li>• Climate change and sea-level rise pose a threat to forest conditions including the areal extent.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park's objectives to include fundraising and volunteer assistance.</li> </ul>

Fundamental Resource or Value	Live oak maritime forest
Identified Data Needs	<ul style="list-style-type: none"> <li>• Monitoring of red bay conditions relative to laurel wilt disease and the effect of the disease on other species.</li> <li>• Forest response to loss of red bay component.</li> <li>• Pre-settlement conditions for all ecosystems on island.</li> <li>• Age classes of live oaks and conditions relative to stand replacement and maintaining the oak maritime community into the future.</li> <li>• Air quality data and potential effects on forest health.</li> <li>• Potential effects of climate change.</li> <li>• Completion of updated vegetation map by Inventory &amp; Monitoring Program.</li> <li>• Data on visitor carrying capacity for island's natural and cultural resources.</li> <li>• Erosion analysis: data collection and analysis to determine contributing factors to back-barrier erosion and development of management alternatives to contend with the problem and/or its effect.</li> </ul>
Identified Planning Needs	<ul style="list-style-type: none"> <li>• Resource stewardship strategy.</li> <li>• Fire management plan—to be completed in 2014.</li> <li>• Long-range interpretive plan; this would help visitors understand the importance of the oak maritime forest and how to protect it as an indirect method of visitor use management.</li> <li>• Climate change scenario plan.</li> </ul>
Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV	<ul style="list-style-type: none"> <li>• <i>The Ecology of the Cumberland Island National Seashore, Camden County, Georgia</i>, Hillestad, et al., Georgia Marine Science Center, 1975.</li> <li>• "Vegetation Map of Cumberland and Little Cumberland Islands Camden County, Georgia"; University of Georgia, 1974.</li> <li>• <i>Cumberland Island National Seashore Resource Management Plan</i> (1994).</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• The Clean Air Act</li> <li>• The Wilderness Act, 1964</li> <li>• National Environmental Policy Act of 1969</li> <li>• Executive Order 13112, "Invasive Species"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006</li> <li>• NPS Natural Resource Management Reference Manual 77</li> <li>• NPS Director's Order 18: <i>Wildland Fire Management</i></li> <li>• NPS <i>Wildland Fire Management Reference Manual 18</i></li> </ul>

<b>Fundamental Resource or Value</b>	<b>Pristine beach (scenic)</b>
<b>Relationship to Significance Statements</b>	<p>Cumberland Island National Seashore is one of the Atlantic Coast's most ecologically diverse barrier islands, where local variations in environmental conditions create extensive and unique communities across the island; from the beach and dune system on the east, through the interdune, freshwater wetland, and upland forest habitats in the interior, to the salt marsh on the west.</p> <p>With almost 18 miles of pristine beach and one of the largest oak maritime forests remaining in the United States, Cumberland Island provides an unparalleled visitor experience.</p> <p>Cumberland Island National Seashore's physical isolation provides visitors opportunities to experience outdoor recreation in an uncrowded, undeveloped setting. Moreover, this isolation helps to preserve and protect the island's fragile natural and cultural resources.</p>
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Only three minor structures, all located behind primary dune line.</li> <li>• Wide expansive beaches.</li> <li>• Dunes are unspoiled.</li> <li>• Sea turtle nesting May through October.</li> <li>• Excellent bird watching throughout the year.</li> <li>• Night sky viewing is very good from Sea Camp and northward; there is more light pollution visible on south end of the island.</li> <li>• There are industrial areas in the viewshed to the south.</li> <li>• There are opportunities to hear natural sounds on the island.</li> <li>• Ocean water quality is relatively clear compared to nearby islands.</li> <li>• Long jetties on the north and south side of the St. Marys Inlet influence dynamics of island geology.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Accretion and erosion of beach varies over space and time.</li> <li>• Rising sea level.</li> <li>• Possible increase in frequency and intensity of storms.</li> <li>• The State of Georgia receives requests for and issues more beach driving permits for Cumberland Island than any other island in the state. There are approximately 295 active beach driving permits for Cumberland Island.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Marine debris / ocean trash.</li> <li>• Intense visitation and overcrowding from boaters landing on south end.</li> <li>• Beach driving.</li> <li>• Industrial areas.</li> <li>• Climate change and sea-level rise pose a threat to the structure of the beach due to the potential increase in the number and intensity of storms, as well as inundation.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park's objectives to include fundraising and volunteer assistance.</li> </ul>

Fundamental Resource or Value	Pristine beach (scenic)
Identified Data Needs	<ul style="list-style-type: none"> <li>• Information on visitor travel patterns and dispersal to supplement visitor use and experience data from 2009 through 2011 Clemson/Vermont study.</li> <li>• Data on visitor carrying capacity for island’s natural and cultural resources.</li> <li>• Monitor beach driving.</li> </ul>
Identified Planning Needs	<ul style="list-style-type: none"> <li>• Resource stewardship strategy.</li> <li>• Commercial services and concessions management plan.</li> <li>• South end management plan.</li> <li>• Visitor use management plan.</li> <li>• Long-range interpretive plan.</li> <li>• Feral horse management plan.</li> </ul>
Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV	<ul style="list-style-type: none"> <li>• Transportation management plan (environmental assessment).</li> <li>• Sea turtle and shorebird nesting data.</li> <li>• Shorebird population surveys.</li> <li>• Visitor survey response.</li> <li>• Monitoring of visitation on south end (numbers, activities).</li> <li>• Survey of beach driving (University of Georgia study 1999; NPS surveys).</li> <li>• <i>Cumberland Island National Seashore Resource Management Plan</i> (1994).</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Continue state regulation of vehicle access with long-term goal of reduced vehicle presence on beach. Georgia Shore Protection Act, 1979 (O.C.G.A. 12-5-230 et seq.)</li> <li>• Coastal Zone Management Act of 1972 (PL 92-583)</li> <li>• Georgia Shore Protection Act (O.C.G.A. 12-5-230 et seq.)</li> <li>• Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources”</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director’s Orders)</b></p> <ul style="list-style-type: none"> <li>• <i>NPS Management Policies 2006</i></li> <li>• NPS Director’s Order 47: <i>Soundscape Preservation and Noise Management</i></li> <li>• <i>NPS Natural Resource Management Reference Manual 77</i></li> </ul>



Fundamental Resource or Value	Wilderness
Relationship to Significance Statements	Cumberland Island National Seashore protects the largest designated wilderness area on an East Coast barrier island.
Current Conditions and Trends	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Overall condition is fair to good.</li> <li>• Untrammeled–Fair. Principle trammeling comes in the form of fire suppression; some remnant structures affect hydrology.</li> <li>• Natural Quality–Fair. Condition affected by infrastructure for electrical services, altered landscapes (remnant fields, roads, trails, causeways, borrow pits, trash dumps, fence rows, houses, docks, other human-made features), presence of feral animals (hogs and horses).</li> <li>• Undeveloped–Fair. Quality affected by remnant fields, roads, trails, causeways, borrow pits, trash dumps, fence rows, houses, infrastructure for electrical service, other human-made features; external intrusion of sounds, visual intrusion of external development and activities.</li> <li>• Opportunities for Solitude and Unconfined Recreation– Fair to good. Quality affected by external intrusion of sights and sounds.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Untrammeled–Currently stable. Increased trammeling may be required in the short term to restore certain degraded natural systems. Long-term trammeling may be required to reintroduce fire to the landscape and maintain its role in natural systems.</li> <li>• Natural Quality</li> <li>• stagnant, park staff cannot actively restore resources without mechanized equipment.</li> <li>• stagnant conditions are also perpetuated by retained rights properties (life estates) within and adjacent to the wilderness that will remain in place for many years.</li> <li>• feral hog control has been successful in reducing the population to acceptable management levels.</li> <li>• Undeveloped–improving because of planned removal of retained rights structures, although many retained rights (life estates) still exist within and adjacent to the wilderness that will remain in place for many years.</li> <li>• Opportunities for Solitude and Unconfined Recreation–stable; no change.</li> </ul>
Threats and Opportunities	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Untrammeled–vehicles (of park staff and island residents) cause trammeling.</li> <li>• Natural Quality–vehicles introduce dust, noise, fumes, trash, visual intrusion.</li> <li>• Undeveloped–possible relocation of Hawkins Creek dock to new location in wilderness; possible future development at Cabin Bluff site, Harriett’s Bluff Union Carbide site, and Cumberland Harbor site (all on mainland); possible increased private boat traffic to island.</li> <li>• Opportunities for Solitude and Unconfined Recreation–aircraft noise and visibility, vehicle noise and visibility, bicycles on unauthorized trails, island residents and their guests using vehicles in wilderness.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Untrammeled–reintroduction of fire and restoration of natural functioning of degraded sites has a positive long-term impact on trammeling.</li> <li>• Natural Quality–fire management, planned removal of former retained right structures, removal of human-made features and/or restore sites such as causeways, borrow pits, trash dumps, fence rows, etc.</li> <li>• Undeveloped–removal of former retained right structures along with other life estates as they become NPS property.</li> <li>• Opportunities for Solitude and Unconfined Recreation–visitor use management.</li> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives to include fundraising and volunteer assistance.</li> </ul>

Fundamental Resource or Value	Wilderness
Identified Data Needs	<ul style="list-style-type: none"> <li>• An accurate wilderness boundary map—existing map that accompanied the 2004 law does not depict a rational alignment relative to on-the-ground features and landscapes.</li> <li>• Legal description of wilderness boundary—required by Director’s Order 41.</li> <li>• Visitor survey regarding wilderness experience at Cumberland Island.</li> <li>• Wilderness character monitoring.</li> <li>• Data on visitor carrying capacity for island’s natural and cultural resources.</li> <li>• Monitor beach driving.</li> </ul>
Identified Planning Needs	<ul style="list-style-type: none"> <li>• Wilderness stewardship plan—will describe how park will maintain and enhance wilderness character. Integrate visitor use management and monitoring framework (measures and standards) for use.</li> <li>• Resource stewardship strategy.</li> <li>• Fire management plan—to be completed in 2014.</li> <li>• Long-range interpretive plan.</li> <li>• Visitor use management plan.</li> <li>• Feral horse management plan.</li> <li>• Trail management plan.</li> <li>• Exotic plant management plan.</li> </ul>
Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV	<ul style="list-style-type: none"> <li>• Draft wilderness management plan— used for background information and reference.</li> <li>• <i>Cumberland Island National Seashore: A History of Conservation Conflict</i> (2004), by Larry M. Dilsaver.</li> <li>• Wilderness boundary maps and data as they exist.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Cumberland Island wilderness legislation (1982, 2004)</li> <li>• Wilderness Act of 1964</li> <li>• Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources”</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director’s Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS <i>Management Policies 2006</i></li> <li>• NPS Director’s Order 41: <i>Wilderness Stewardship</i></li> <li>• NPS Director’s Order 47: <i>Soundscape Preservation and Noise Management</i></li> <li>• NPS <i>Reference Manual 41: Wilderness Stewardship</i></li> <li>• NPS <i>Natural Resource Management Reference Manual 77</i></li> <li>• NPS <i>Keeping it Wild in the National Parks User Guide</i></li> </ul>

Fundamental Resource or Value	Primitive and undeveloped character
Relationship to Significance Statements	Cumberland Island National Seashore’s physical isolation provides visitors opportunities to experience outdoor recreation in an uncrowded, undeveloped setting. Moreover, this isolation helps to preserve and protect the island’s fragile natural and cultural resources.
Current Conditions and Trends	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>The park’s enabling legislation states that “Except for certain portions of the seashore deemed to be especially adaptable for recreational uses..., which shall be developed for such uses as needed, the seashore shall be permanently preserved in its primitive state, and no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions not prevailing, nor shall any road or causeway connecting Cumberland Island to the mainland be constructed.”</li> <li>Good overall– island continues to be relatively undeveloped, with the exception of the use of motorized transportation.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>Static– undeveloped character is supported by the park’s enabling legislation, wilderness legislation, and the general management plan.</li> </ul>
Threats and Opportunities	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>“Lands and Legacies Tour” moves people adjacent to wilderness and increases vehicle traffic, which can threaten primitive character.</li> <li>Increased number of vehicles required to support increase in visitation on the north end of the island.</li> <li>The presence of motorized and mechanized vehicles on the island.</li> <li>The State of Georgia receives requests for and issues more beach driving permits for Cumberland Island than any other island in the state.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives; to include fundraising and volunteer assistance.</li> <li>Remove designated structures in accordance with <i>Former Reserved Properties Management Plan and Environmental Assessment</i>.</li> <li>Visitor education for appropriate recreational opportunities to support undeveloped character.</li> </ul>
Identified Data Needs	<ul style="list-style-type: none"> <li>None identified.</li> </ul>
Identified Planning Needs	<ul style="list-style-type: none"> <li>Facility use plan.</li> <li>Wilderness stewardship plan.</li> <li>Visitor use management plan.</li> <li>Long-range interpretive plan.</li> </ul>
Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV	<ul style="list-style-type: none"> <li><i>Former Reserved Properties Management Plan and Environmental Assessment</i>.</li> <li>Transportation management plan.</li> <li>General management plan (1984).</li> <li>Visitor capacity studies.</li> <li>Visitor survey regarding wilderness experience at Cumberland Island.</li> <li>Housing management plan.</li> </ul>

Fundamental Resource or Value	Primitive and undeveloped character
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Cumberland Island National Seashore enabling legislation (P.L. 92-536)</li> <li>• Cumberland Island wilderness legislation (1982, 2004)</li> <li>• Wilderness Act of 1964</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006</li> <li>• NPS Director's Order 41: <i>Wilderness Stewardship</i></li> <li>• NPS Director's Order 47: <i>Soundscape Preservation and Noise Management</i></li> <li>• NPS Natural Resource Management Reference Manual 77</li> </ul>



<b>Fundamental Resource or Value</b>	<b>An uncrowded setting (that provides opportunities for both passive and active outdoor recreation)</b>
<b>Relationship to Significance Statements</b>	<p>Cumberland Island National Seashore’s physical isolation provides visitors opportunities to experience outdoor recreation in an uncrowded, undeveloped setting. Moreover, this isolation helps to preserve and protect the island’s fragile natural and cultural resources.</p>
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Cumberland Island National Seashore accommodates 300 people per day and no public vehicle access is available from the mainland.</li> <li>• The setting is in excellent condition and there is a high-quality visitor experience on Cumberland Island National Seashore (Clemson/Vermont, 2009–2011).</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Stable because of approximate 300 person per day capacity and lack of bridge.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Increasing and unmanaged visitation via private boat.</li> <li>• Demand for increase in visitor access to the island.</li> <li>• Climate change and sea-level rise pose a threat due to the potential loss and/or alteration of resources the recreational activities are based on.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Develop a support organization for Cumberland Island National Seashore that will further the park’s objectives to include fundraising and volunteer assistance.</li> </ul>
<b>Identified Data Needs</b>	<ul style="list-style-type: none"> <li>• Data and analysis on visitor travel patterns and dispersal to supplement visitor use data (including perceived acceptability ratings for People at One Time) from 2009 through 2011 Clemson/Vermont study.</li> <li>• Continue research on visitor use trends including campground use.</li> <li>• Monitor beach driving.</li> </ul>
<b>Identified Planning Needs</b>	<ul style="list-style-type: none"> <li>• Wilderness stewardship plan.</li> <li>• Visitor use management plan.</li> <li>• South end management plan.</li> <li>• Commercial services and concessions management plan.</li> <li>• Long-range interpretive plan.</li> <li>• Resource stewardship strategy.</li> <li>• Trail management plan.</li> <li>• Public hunt management plan.</li> </ul>
<b>Existing Information (plans, data, etc.) that Provides Base Knowledge for FRV</b>	<ul style="list-style-type: none"> <li>• Visitor use data (Clemson/Vermont, 2009–2011).</li> <li>• University of Idaho servicewide visitor satisfaction survey.</li> <li>• Visitation permit statistics in park records (campers, hunters, etc.).</li> <li>• Ferry boat visitation counts.</li> <li>• Visitor comment forms.</li> <li>• Data on private boater use on south end (weekends and holidays, 2007–2011).</li> <li>• Boat traffic surveys on Beach Creek.</li> <li>• Data on beach driving permits (Georgia Division of Natural Resources)–There are approximately 295 active beach driving permits for Cumberland Island.</li> </ul>

<p><b>Fundamental Resource or Value</b></p>	<p><b>An uncrowded setting (that provides opportunities for both passive and active outdoor recreation)</b></p>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Cumberland Island wilderness legislation (1982, 2004)</li> <li>• Cumberland Island National Seashore enabling legislation (PL 92-536)</li> <li>• Wilderness Act of 1964—solitude and primitive and unconfined types of recreation</li> </ul> <p><b>NPS Policy-level Conditions (NPS Management Policies 2006 and Director’s Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006</li> <li>• Wilderness Act of 1964—solitude and primitive and unconfined types of recreation</li> <li>• NPS Director’s Order 41: <i>Wilderness Stewardship</i></li> <li>• NPS Director’s Order 47: <i>Soundscape Preservation and Noise Management</i></li> <li>• <i>Cumberland Island National Seashore General Management Plan</i> (1984)</li> </ul>



## 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 not directly related to purpose and significance, but still indirectly affects them. 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 Cumberland Island National Seashore and the associated planning and data needs to address them:

- **Strategies for Comprehensive Resource Stewardship.** The park has many needs for documentation and assessment of cultural and natural resources known to exist on the island. The park also lacks specific desired future natural and cultural resource condition goals. In addition, there is a need to develop adaptive management approaches to mitigate threats from human activities as well as environmental forces. A resource stewardship strategy would take an integrated natural and cultural resources approach to identify conservation objectives, potential activities for managing resources, and implementation strategies.
- **Development of a Friends Group.** The park needs to foster the development of a support organization similar to the friends groups that are in place for many national park units, large and small. The organization would work in cooperation with the National Park Service to fund projects and programs that protect, preserve, and enhance the natural and cultural resources as well as the visitor experience of Cumberland Island National Seashore. Providing volunteers to support projects and programs would also be a primary objective of the group. Financial and volunteer support is also needed to advance educational programs and research projects. In addition, the organization would promote and enhance public understanding of and appreciation for all aspects of Cumberland Island National Seashore.
- **Adaptive Use of Facilities.** Currently, the park directly manages more than 70 structures that have a broad variety of functions and potential, ranging from the Plum Orchard Mansion to storage sheds. The vast majority of these structures are contributing features in the National Register of Historic Places and, as such, require protection and appropriate treatment. At the same time the park needs facilities to support visitor services, exhibits, maintenance workshops, office space, storage, and housing. Moreover, because many of the structures are a key part of the island's story they need to be incorporated into and made available for interpretation and education. The park needs to develop a comprehensive management plan that outlines the most effective use and adaptation (as necessary) of park facilities to ensure conservation, visitor and interpretive services, operational efficiency, health and safety, and financial viability are achieved. The plan would identify the structures, define park functions, match the appropriate facility with the appropriate activity, and set a course for implementation.
- **Incorporation of Expiring Reserved Properties.** Twelve retained rights agreements for use and occupancy remain active within Cumberland Island National Seashore, all of which are life estates for one or more individuals. Some of the agreements will probably end in the coming years but, most will continue on well into the future. NPS management must be attentive and have a long-term perspective on how to administer these properties when they enter into full NPS custody. Handling these properties will have complexities such as status in the National Register of Historic Places, relationship to wilderness, applicability to park goals and objectives, and the fact that decisions regarding one property will have implications for how others will be managed. The park has established a template for guiding the relevant management decisions with the *Former Reserved Properties Management Plan and Environmental Assessment*, which was completed in July 2012. The plan specifically addressed seven properties associated with reserve agreements that expired between 2010 and 2011, but it also established a process that can be used for future acquisitions.

- **Understanding of Visitor Use.** The park needs to gain a better understanding of how visitors disperse across the island once they arrive via ferry. A better understanding of the number of people that are accessing the island via private boats is also needed. Collectively, this would give the park enhanced knowledge of use trends and would contribute to better allocation of visitor services and resource protection that are necessary in various locations on the island. A visitor use management plan is needed to address visitor use patterns, access to and arrival on the island, and would incorporate visitor capacity data from recent studies. Data on visitor travel patterns, dispersal, and campground use are needed to supplement visitor use data from the 2009 through 2011 Clemson/Vermont study. Additionally, statistics on the actual number of people at one time at a given location on the island would be useful to compare against the perceived acceptability ratings for people at one time that were defined in the study.
- **Limits on Daily Number of Visitors.** The 1984 general management plan says that to “provide for a continuation of the existing natural character of the island, free from extensive development and intensive visitor use,” visitation to the island “is to remain at approximately 300 people a day.” That daily limit is a recurring source of debate with stakeholders, with some being supportive of the 300 limit while others advocate an increase in the number of visitors per day. Park management is also frequently confronted with how to cope with that limit when it is exceeded by visitor demand. The park needs to revisit the visitation limit as part of a visitor use plan. Existing and supplementary visitor use and experience data needs to be incorporated into that evaluation. Moreover, the park must obtain data on resource carrying capacity and resource protection, which have not been part of the previous studies but are essential in defining levels of visitation. Public input and comment are also critical in addressing the issue.
- **Visitor Services Compatible with Resource Protection.** In order to provide appropriate services to the public, there is a need to explore the services that are available and ensure they are compatible with resource protection. A commercial services and concessions management plan is needed to provide direction for management of commercial services in the park over the next 10 to 15 years. The plan would (1) determine what levels and types of commercial services are necessary and/or appropriate, consistent with the Concessions Management Improvement Act of 1998 and *NPS Management Policies 2006*, (2) determine whether those services are compatible with the park’s mission of preserving and protecting its natural and cultural resources, and (3) determine how visitors can be provided high-quality experiences.
- **Interpretive Messaging.** The park lacks an interpretive plan that would establish visitor experience goals, identify fundamental visitor experience opportunities at the park, and begin to address a variety of needs with respect to visitor service, wayfinding, and interpretive programs. A long-range interpretive plan would establish a strategy to create and/or improve interpretive media, personal services, and facilities. The plan would address the park’s current needs and issues including improving orientation waysides and information, inadequate interpretive wayside exhibits, an inadequate reservation system, and improving information for those planning a visit to Cumberland Island. It would also address inadequate interpretation of a variety of subjects that are important to understanding and appreciation of the island and its cultural and natural resources.
- **Feral Horse Management.** The feral horse population that has free range on Cumberland Island is a nonnative species that has documented adverse impacts on the island’s natural resources. General observations also point to additional impacts that have not been thoroughly investigated and/or documented. Likewise, observations also indicate that they have an adverse impact on cultural resources including archeological and historic features. However, the horses are extremely popular with many visitors, stakeholders, and segments of the general public. Many visitors view them as a fundamental part of their experience on Cumberland Island. In addition, there are realistic as well as speculative concerns about the horses’ health. Given all of these factors and the emotions involved, managing the horses and their impacts is a highly political and sensitive issue. Development of a feral horse management plan will be a decidedly complex and challenging undertaking. Moreover, management actions put forth in the plan will require significant funding and long-term operational commitments. Nonetheless, such a plan is necessary to protect the island’s natural and cultural resources and take into account the health of the horses.

- **Shoreline Protection.** Zones of erosion on the island’s western shoreline (referred to as the back-barrier) and tidal creeks are a significant problem, with long-term rates of bank loss as high as one foot or more per year. This erosion carries away significant amounts of marsh and uplands, destroying mature vegetation and established habitat. It also damages (or has obliterated completely) significant archeological features such as Native American settlements, Spanish missions, and colonial forts. Historic structures and island infrastructure are also now at risk. Past studies have indicated where erosion “hot-spots” are located on the island and a current study will help define what the causative agent(s) are for the back-barrier. Natural processes such as current and wave action are probably a factor. Sea level rise and increased storm activity and intensity may contribute to the problem. In addition, anthropogenic forces may also play a part including vessel wakes, propeller wash, and dredging for the navigational channel adjacent to the island’s south end. The rooting of feral hogs and the grazing and trampling of feral horses also destabilize shorelines. Once the principal sources of erosion have been defined the park needs to develop a shoreline management plan that will outline courses of action to prevent the erosion and/or mitigate its impacts.
- **Wilderness Guidance.** The park lacks a wilderness stewardship plan to guide management of its 9,886 acres of designated wilderness and 10,500 acres classified as potential wilderness. A wilderness management plan would serve as a document that establishes the park’s wilderness vision, would identify management actions necessary to meet wilderness objectives, and would provide a working guide for NPS staff responsible for the long-term and day-to-day management of the wilderness resources. Wilderness management on Cumberland Island is complicated by a number of factors not normally associated with wilderness, including retained rights holdings and activities within and/or adjacent to the wilderness area. An important goal of a wilderness plan would be to clarify the parameters of the individual retained rights and ensure that these rights are honored while at the same time upholding the park’s responsibilities for preserving wilderness resources and values. Additionally, a plan would include analysis and direction regarding dispersed versus site-based camping, waste management, signage, restoration of areas altered by manmade structures, and minimum tools requirements for anticipated operations/activities in the wilderness.
- **Operational Efficiency.** Cumberland Island National Seashore preserves many different types of resources and hosts thousands of visitors each year. The funding required to manage the park is considerable and must be obtained from multiple sources: visitor fees, base funding, program and project funding, and nonprofit donations. In order to address this key issue of operational efficiency, a business plan is needed to improve the ability of the park to more clearly communicate their financial status with principal stakeholders. A business plan for Cumberland Island National Seashore would analyze current fiscal resource allocations in the context of near-term and longer-term park priorities, perform specialty analyses on high-impact opportunities to improve park operations, and develop management and financial strategies to accomplish park goals.
- **Predator Management.** At Cumberland Island National Seashore, nonnative and native predator species pose significant management challenges due to their potential impact on state- and federally protected wildlife, including sea turtles and shorebirds. Species that can cause problems include feral hogs, coyotes, raccoons, bobcats, opossums, and armadillos. Feral hog populations are currently within acceptable levels as a result of a management program that was initiated in 2001. Hog depredation on sea turtle nests has been eliminated, but management must be continuously vigilant or the hog population and related threats will quickly return. Coyotes are a recent arrival on the island, but they have quickly developed into a viable, established population. As a result, shorebird nesting success has plummeted. Although minimal, the park has documented coyote-related depredation to sea turtle nests since 2010. Effective measures are in place to keep raccoons, opossums, and armadillos from negatively impacting sea turtle nests, but they still pose a threat to shorebird nesting. A predator management plan is needed to define approved, effective measures for managing the threats posed by predators; in particular, measures are needed to manage the threats from the nonindigenous coyote, which is likely to impact a wide range of wildlife species as their numbers grow.

- **Wildland Fire.** Wildland fire is an important component of the ecology of Cumberland Island, with some species and habitats being fire adapted and dependent. However, the objective for fire management in recent history has largely been one of suppression, including the 2004 fire management plan. Suppression has led to alterations in habitat structure and heavy vegetative fuel loads. The heavy fuels have the potential for creating large, intense fires that are a danger to life and property, threaten cultural resources, and may devastate biological communities. A comprehensive fire management plan is being prepared for Cumberland Island National Seashore that will restore fire to its natural role on the island while providing for the safety of life, property, and cultural resources. Such a plan is critical for preserving and protecting the island resources and must be complemented by adequate levels of fire management personnel and equipment.
- **South End Management.** The southern tip of Cumberland Island is one of two critical habitats for shorebirds on the island, providing areas for nesting, foraging, and roosting. In addition, tidal creeks there are frequented by manatees (federally listed) and dolphins and support large expanses of salt marsh. However, the south end is also popular with visitors accessing the beaches and waters via private boats, with people numbering in the hundreds at peak periods. Associated activity and sheer numbers easily have the potential to disturb natural and cultural resources. It also has the potential to negatively impact the visitor experience with overcrowding and conflicting recreational pursuits. Visitation on the south end is currently uncontrolled for the most part. A management plan is needed to mitigate potential resource impacts and ensure a high-quality visitor experience.
- **Accessibility.** NPS Director's Order 42: *Accessibility for Visitors with Disabilities in National Park Service Programs and Services* commits park units to identifying barriers that limit access to park programs, facilities, and services; and to developing transition plans and identifying how and when these barriers will be removed (where feasible). Cumberland Island National Seashore seeks to address universal accessibility, both physical and programmatic. Some of the challenges the park needs to address include ferry access, compatibility with historic structures and landscapes, and the lack of hardened pathways on the island. An accessibility plan is currently being developed to help address this issue at the park.
- **Climate Change.** Climate change is a far-reaching and long-term issue that has the potential to affect all aspects of Cumberland Island National Seashore. Climate models predict that over the next 100 years, the Southeast will become warmer, and storm surges will increase as storm intensity increases. As the island physically adapts to the projected rise in sea level the associated ecological communities will undergo geographic changes (size, location, physical and biological composition, etc.) and in turn species associated with those habitats will be impacted. Other negative impacts could include inundation, flooding, erosion, wave damage, storm damage, and higher tidal effects. Potential impacts could also occur to the park's cultural resources, visitor experiences, and park infrastructure. A climate change scenario plan is needed to assist the park and its stakeholders with the formulation of scenarios that could realistically materialize under future climate change and with the development of management prescriptions to prepare for and/or contend with the potential consequences of these scenarios.

## 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’s efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-making Process Is Needed			
Related to an FRV?	Planning Needs	Priority (H, M, L)	Rationale
X	Resource stewardship strategy (combined cultural and natural resource management plan)	H	The park lacks a comprehensive strategy for managing cultural and natural resources. The last resource management plan was completed in 1994 and is out of date.
X	Visitor use management plan	H	Plan would address visitor use patterns, access to and arrival on island, incorporate carrying capacity data, and address daily visitation limits.
X	Facility use plan	H	Ensure that preservation of historic structures, visitor and interpretive services, operational efficiency, health and safety, and financial viability are achieved.
X	Long-range interpretive plan	H	Establish visitor experience goals, identify fundamental visitor experience opportunities, and begin to address a variety of needs with respect to visitor service, wayfinding, and interpretive programs. It could be used as an indirect method of visitor use management.
X	Shoreline management plan	H	Zones of severe erosion on the island’s back-barrier have damaged and/or threaten archeological sites, historic features, habitat, and island infrastructure.

Planning Needs – Where A Decision-making Process Is Needed			
Related to an FRV?	Planning Needs	Priority (H, M, L)	Rationale
X	Wilderness stewardship plan	H	Establish the park's wilderness vision, identify management actions necessary to meet wilderness objectives, and provide a working guide for NPS staff responsible for the long-term and day-to-day management of the wilderness resources.
X	South end management plan	H	Uncontrolled visitation to the island's southern tip via private boats impacts critical bird habitat as well as other resources, both natural and cultural. It may also produce intense visitation and overcrowding that is not compatible with an undeveloped, primitive character.
X	Business plan	H	Ensure long-term operational sustainability through analysis of fiscal resource allocations in the context of park priorities, specialty analyses on strong opportunities to improve park operations, and develop management and financial strategies to accomplish park goals.
X	Predator management plan	H	Nonnative and native predator species pose significant threats to state- and federally protected wildlife including sea turtle and shorebird nesting. Impacts could affect a wide range of wildlife species. Threats from coyotes are a significant concern.
	Accessibility plan (underway)	H	This plan is needed to adapt park facilities and programs for all aspects of accessibility impairment including mobility, vision, and hearing.
X	Updated fire management plan (underway)	H	Suppression of wildland fires has removed the natural fire regime resulting in habitat alteration, heavy vegetative fuel loads, and the potential dangers of extreme fire behavior. To be completed in 2014.
X	Development of a friends group	M	Organization to work in cooperation with the National Park Service to fund and assist with projects and programs that protect, preserve, and enhance the natural and cultural resources as well as the visitor experience of Cumberland Island National Seashore.

Planning Needs – Where A Decision-making Process Is Needed			
Related to an FRV?	Planning Needs	Priority (H, M, L)	Rationale
X	Commercial services and concessions management plan	M	To provide direction for management of commercial services in the park over the next 10 to 15 years to support the visitor experience and ensure services are compatible with resource preservation and protection.
X	Feral horse management plan	M	Protect the island's natural and cultural resources negatively impacted by the horses and take into account the health of the horses. Visitor and stakeholder perspectives need to be considered.
X	Parkwide ethnographic program strategy	M	The stories of the ethnic communities that were a fundamental part of the island's history need to be incorporated into interpretive programs and exhibits.
X	Historic structure adaptive reuse plans	M	Will be integrated as part of previously identified facility use plan.
X	Integrated pest management plan	M	Termites are an ongoing, critical threat to historic structures. Mice, bats, and other species can invade structures.
X	Trail management plan	M	Assess, establish desired conditions for, and set maintenance recommendations for parkwide trail network.
X	Public hunt management plan	M	The park needs a management strategy for the legislatively mandated public hunts. Plan should address the hunter experience, wildlife management, game species, hunt locations within seashore, methods, etc.
X	Climate change scenario plan	L	Climate change consequences such as sea-level rise and intense storm activity are a threat to island resources, visitor experience, and infrastructure.
X	Exotic plant management plan	L	To direct management actions for control of nonnative plant infestations on the island.
X	Sign plan for Dungeness	L	Address site-specific needs for the district with respect to visitor service, wayfinding, and interpretive programs.

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to an FRV?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Rationale, Including Which Planning Need This Data Need Relates To</b>
X	Archeological assessment and investigations, including data and artifact recovery at vulnerable sites	H	Numerous sites are threatened with loss or damage by hazards such as erosion and unauthorized collecting. Known sites and recent discoveries have not been fully investigated. Entire island, particularly the interior, has not been thoroughly assessed for potential sites.
X	Erosion analysis	H	Data collection and analysis to determine contributing factors to back-barrier erosion and development of management alternatives to contend with the problem and/or its effects.
X	Legal description and accurate map of the boundaries of Cumberland Island Wilderness	H	The existing map that accompanied the 2004 law does not depict a rational alignment relative to on-the-ground features and landscapes, nor was a legal description of the boundary ever written after the 2004 adjustment, which is required under Director's Order 41.
X	Data on visitor user capacity for island's natural and cultural resources	H	A visitor use management plan, which would define visitor activities and limits, must incorporate these (currently unavailable) data to ensure preservation and protection of the island's natural and cultural resources.
X	Modeling of visitor dispersal travel patterns to supplement the information that was collected during Clemson/Vermont study (visitor experience, visitor use)	H	Data need for visitor use management plan. Correlating data of the perceived acceptability ratings for visitor experience (as defined in the Clemson study) with how to achieve those desired conditions in reality.
X	Data and analysis on the number of people at one time (Clemson/Vermont 2009–2011 study)	H	Data need for visitor use management plan. Correlating data of the perceived acceptability ratings for visitor experience (as defined in the Clemson study) with how to achieve those desired conditions in reality.
X	Comprehensive archeological investigation of the San Pedro de Mocama site	M	One of the most significant and vulnerable archeological sites on the island. Several investigations have been done but comprehensive work is needed to identify spatial extent and remaining features, recover artifacts in peril, and produce cumulative documentation.

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to an FRV?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Rationale, Including Which Planning Need This Data Need Relates To</b>
X	Current vegetation map (in progress)	M	Current vegetation map was completed in 1974. An updated version is being produced through the Southeast Coast Inventory and Monitoring Program.
X	Pre-settlement conditions for all ecosystems on the island to assist natural resources restoration and determine desired resource conditions.	M	Data are needed to support the resource stewardship strategy and the fire management plan.
X	Update historic resource study	M	Existing study is more than 35 years old and does not include up-to-date research or field information.
X	Water quality data of freshwater systems	M	Data are needed to monitor conditions of surface waters and subsurface aquifers that may be vulnerable to saltwater intrusion, climate change, wildland fire activity, feral animals, excessive withdrawal, and other threats.
X	Tree stand/ regeneration conditions	M	Inventory and monitoring is needed for age classification and stand composition to ensure that the oak maritime forest is healthy and maintained for future generations.
X	Cultural landscape reports for Plum Orchard (underway), High Point - Half Moon Bluff, and Stafford	M	Site histories, characteristics, conditions, and treatment recommendations do not exist for the landscapes of these national register districts.
X	National Register of Historic Places nominations updated and submitted	M	Contributing features for the respective historic districts have been altered or were overlooked completely and/or additional information has been obtained. Condition assessments and descriptive data need to be updated. Outlying or newly identified features need determination of eligibility.
X	Update of the 1984 National Register of Historic Places multiple resource submission nomination forms	M	This multiple resource nomination addresses the park's significant archeology. The document is nearly 30 years old and needs to be updated to include additional archeological resources and other new information.

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to an FRV?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Rationale, Including Which Planning Need This Data Need Relates To</b>
X	Ethnographic assessment and overview	M	Focused, comprehensive research and documentation has not been done with respect to the ethnic communities that were a fundamental part of the island's history.
X	Parkwide ethnographic program strategy	M	The stories of the ethnic communities that were a fundamental part of the island's history need to be incorporated into interpretive programs and exhibits.
X	Oral history	M	Valuable oral histories were compiled in the early 2000s, yet some data gaps remain.
X	Visitor survey regarding wilderness experience at Cumberland Island National Seashore	M	Necessary to direct and justify decisions of the needed wilderness management plan.
X	Scope of collections	M	Guide acquisition of new artifacts, refine the existing collection, and maintain the quality and efficiency of the park's curatorial collection.
X	Park boundary survey	M	Boundary markers do not exist to guide field/operational related decisions and activities. Recent changes in ownership are not reflected in GIS or hardcopy data. Questions of marsh ownership. Questions of state/federal shoreline boundary.
X	Feral horse study to comprehensively quantify damages and impacts specifically on Cumberland Island, on both natural and cultural resources	M	Necessary to direct and justify decisions of the needed feral horse management plan.
X	Updated historic structure reports	M	Guide treatment, protection, and potential adaptation of historic structures as well as contribute to interpretive programs.
X	Continued monitoring data red bay die-off	L	Determine how the forest is changing in the wake of the die-off and guide potential steps for management.
X	Air quality data	L	Modeling data exist but definitive air quality data have not been collected on the island nor have potential affects been assessed or monitored with respect to island resources.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV?	Data and GIS Needs	Priority (H, M, L)	Rationale, Including Which Planning Need This Data Need Relates To
X	Climate change data	L	Complete climate change vulnerability assessments for cultural and natural resources. Incorporate assessment findings into management and planning strategies in order to adapt to uncertain climate futures. Continue supporting NOAA U.S. Climate Reference Network station at Stafford Field.
X	Monitor beach driving	L	Large number of permits issued but actual vehicle activity and related impacts are unknown.
X	Campground use data	L	Determine effects on visitor experience and island resources.
X	Assessment of associated museum collection in repositories outside Cumberland Island	L	Condition and security of collection objects is unknown.
X	Wilderness character monitoring	L	Ensure wilderness values and objectives are being met as well as achievement of desired visitor experience.



## Part 3: Contributors

### Park

- Fred Boyles, Superintendent (Retired)
- Bridget Bohnet, Chief Ranger
- Carl David, Facility Manager
- John Fry, Chief of Resource Management
- Doug Hoffman, Wildlife Biologist
- Lisa Nielsen, Administrative Officer
- Maggie Tyler, Chief of Interpretation and Education

### Region

- Jami Hammond, Environmental Compliance Specialist
- Mark Kinzer, Environmental Protection Specialist / Southeast Region Liaison

### Other NPS Staff

- Melody Bentfield, Contract Librarian, Denver Service Center-Planning Division
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- Pam Holtman, Quality Assurance Coordinator, WASO Park Planning and Special Studies Division
- John Paul Jones, Visual Information Specialist, Denver Service Center-Planning Division
- Carrie Miller, Project Manager and Cultural Resource Specialist, Denver Service Center-Planning Division
- Ericka Pilcher, Visitor Use Specialist, Denver Service Center-Planning Division
- Nancy Shock, Foundation Coordinator, WASO Park Planning and Special Studies Division
- Zak Wood, GIS Specialist, Denver Service Center-Planning Division

# Appendixes

## Appendix A: Enabling Legislation and Legislative Acts for Cumberland Island National Seashore

Cumberland Island National Seashore is Established by Congressional Act on October 23, 1972

1066

PUBLIC LAW 92-536—OCT. 23, 1972

[86 STAT.]

Public Law 92-536

October 23, 1972  
[S. 2411]

AN ACT

To establish the Cumberland Island National Seashore in the State of Georgia, and for other purposes.

Cumberland Island National Seashore, Ga. Establishment.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to provide for public outdoor recreation use and enjoyment of certain significant shoreline lands and waters of the United States, and to preserve related scenic, scientific, and historical values, there is established in the State of Georgia the Cumberland Island National Seashore (hereinafter referred to as the "seashore") consisting of the area generally depicted on the drawing entitled "Boundary Map, Cumberland Island National Seashore", numbered CUIS-40,000B, and dated June 1971, which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. The Secretary of the Interior (hereinafter referred to as the "Secretary") may after notifying the Committees on Interior and Insular Affairs of the United States House of Representatives and United States Senate in writing, make minor adjustments in the boundary of the seashore from time to time by publication of a revised drawing or other boundary description in the Federal Register, but the total acreage within the boundaries shall not exceed forty thousand five hundred acres.

Boundary revisions, notification of congressional committees, publication in Federal Register.

Land acquisition.

SEC. 2. Within the boundaries of the seashore, the Secretary may acquire lands, waters, and interests therein by purchase, donation, transfer from any Federal agency, or exchange. The Secretary may also acquire not to exceed one hundred acres of lands or interests in lands on the mainland to provide access to the administrative and visitor facilities for the seashore. Any lands or interests therein owned by the State of Georgia, or any political subdivision thereof may be acquired only by donation. Notwithstanding any other provision of law, any Federal property located within the boundaries of the seashore may, with the concurrence of the agency having custody thereof, be transferred without transfer of funds to the administrative jurisdiction of the Secretary for the purposes of the seashore.

Cumberland Island Parkway, right-of-way.

SEC. 3. For the purpose of providing access from Interstate 95 to the mainland administrative and visitor facilities of the seashore, the Secretary may designate as the Cumberland Island Parkway a right-of-way, together with adjacent or related sites for public non-commercial recreational use and for interpretation of scenic and historic values, of not more than one thousand acres of lands, waters, and interests therein. The Secretary is authorized to acquire only by donation those lands and interests therein, and other property comprising such right-of-way and adjacent or related sites as he may designate pursuant to this Act for the development, hereby authorized, of a road of parkway standards, including necessary bridges, spurs, connecting roads, access roads, and other facilities, and for the development and interpretation of recreation areas and historic sites in connection therewith. Lands acquired for the parkway shall be administered as a part of the seashore, subject to all laws and regulations applicable thereto, and subject to such special regulations as the Secretary may promulgate for the parkway.

Administration. Regulations.

Private right of use and occupancy.

SEC. 4. (a) With the exception of any property deemed necessary by the Secretary for visitor facilities or administration of the seashore, any owner or owners of improved property on the date of its acquisition by the Secretary may, as a condition of such acquisition, retain for themselves and their successors or assigns a right of use and occu-

pancy of the property for noncommercial residential purposes, for twenty-five years, or, in lieu thereof, for a term ending at the death of the owner or his spouse, whichever is later. The owner shall elect the term to be reserved. The Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date of the right retained by the owner: *Provided, however*, That, in addition, for so long as a right of use and occupancy remains in effect by the donors of land of one hundred acres or more, the Secretary shall not, with respect to such lands, develop any public use facilities except for trails, road access, and utilities: *Provided further*, That when acquiring lands, waters, and interests therein from the National Park Foundation, its successors and assigns, the Secretary shall acquire such lands, waters, and interests subject to the written terms and conditions contained in those transactions, including but not limited to options, entered into by the National Park Foundation prior to January 1, 1973, and that such previous written rights and interests shall prevail over provisions of this paragraph.

(b) A right of use and occupancy retained or enjoyed pursuant to this section may be terminated with respect to the entire property by the Secretary upon his determination that the property or any portion thereof has ceased to be used for noncommercial residential purposes and upon tender to the holder of a right an amount equal to the fair market value, as of the date of tender, of that portion of the right which remains unexpired on the date of termination.

Commercial use,  
prohibition.

(c) The term "improved property", as used in this section shall mean a detached, noncommercial residential dwelling, the construction of which was begun before February 1, 1970 (hereinafter referred to as "dwelling"), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

"Improved  
property."

(d) (1) In order to provide an opportunity for the establishment of a natural and scenic preserve by voluntary private action of certain owners of lands within the seashore, and notwithstanding anything to the contrary herein contained, no lands or interests in lands shall be acquired on Little Cumberland Island without the consent of the owner, for a period of one year from the date of enactment of this Act, except as specifically otherwise provided herein.

Little Cumberland  
Island, ac-  
quisition restric-  
tions.

(2) In the event that the owners of land on Little Cumberland Island enter into an irrevocable trust or some other irrevocable agreement for the preservation of the resources of Little Cumberland Island which, in the judgment of the Secretary, assures the protection of the resources in a manner consistent with the purposes for which the seashore is established, the authority of the Secretary to acquire such lands shall be suspended for such time as the trust is in effect and the lands are used and occupied in accordance therewith.

(3) If, at any time during the one-year period following the date of enactment of this Act, the Secretary determines that any lands on Little Cumberland Island are threatened with development, or other uses, inconsistent with the establishment or continuation of the trust herein referred to, then the Secretary may acquire such lands, or interests therein, by any of the methods provided for in section 2 of this Act.

Hunting and  
fishing.

SEC. 5. The Secretary shall permit hunting, fishing, and trapping on lands and waters under his jurisdiction within the boundaries of the seashore in accordance with the appropriate laws of Georgia and the United States to the extent applicable, except that he may designate zones where, and establish periods when, no hunting, fishing, or trapping shall be permitted for reasons of public safety, administration, fish and wildlife management, or public use and enjoyment. Except in emergencies, any regulations prescribing any such restrictions shall be put into effect only after consultation with the appropriate State agency responsible for hunting, fishing, and trapping activities.

Administration.

SEC. 6. (a) The seashore shall be administered, protected, and developed in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1, 2-4), as amended and supplemented, except that any other statutory authority available to the Secretary for the conservation and management of natural resources may be utilized to the extent he finds such authority will further the purposes of the Act.

Preservation in  
primitive state.

(b) Except for certain portions of the seashore deemed to be especially adaptable for recreational uses, particularly swimming, boating, fishing, hiking, horseback riding, and other recreational activities of similar nature, which shall be developed for such uses as needed, the seashore shall be permanently preserved in its primitive state, and no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions not prevailing, nor shall any road or causeway connecting Cumberland Island to the mainland be constructed.

State jurisdic-  
tion.

SEC. 7. Nothing in this Act shall deprive the State of Georgia or any political subdivision thereof of its civil or criminal jurisdiction over persons found, acts performed, and offenses committed within the boundaries of the seashore, or of its right to tax persons, corporations, franchises, or other non-Federal property on lands included therein.

Water resource  
developments.

SEC. 8. The authority of the Secretary of the Army to undertake or contribute to water resource developments, including shore erosion control, beach protection and navigation improvements on land and/or waters within the Cumberland Island National Seashore shall be exercised in accordance with plans which are mutually acceptable to the Secretary of the Interior and the Secretary of the Army and which are consistent with both the purpose of this Act and the purpose of existing statutes dealing with water and related land resource development.

Report to  
President.

SEC. 9. Within three years from the date of enactment of this Act, the Secretary of the Interior 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)), his recommendations as to the suitability or nonsuitability of any area within the national 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.

Appropriation.

SEC. 10. There are authorized to be appropriated not to exceed \$10,500,000 for the acquisition of lands and interests in lands and not to exceed \$27,840,000 for development of the seashore.

Approved October 23, 1972.

Cumberland Island Wilderness (8,840 acres) is Designated by Congressional Act on September 8, 1982, and Another 11,718 Acres are Designated as Potential Wilderness

Stat. 890, 892; 16 U.S.C. 1132(c)), certain lands in the Cumberland Island National Seashore, Georgia, which comprise about eight thousand eight hundred and forty acres, and which are depicted on the map entitled "Wilderness Plan, Cumberland Island National Seashore, Georgia", dated November 1981, and numbered 640-20038E, are hereby designated as wilderness and therefor, as components of the National Wilderness Preservation System. Certain other lands in the Seashore, which comprise about eleven thousand seven hundred and eighteen acres, and which are designated on such map as "Potential Wilderness", are, effective upon publication in the Federal Register of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act have ceased, designated wilderness. Such notice shall be published with respect to any tract within such eleven thousand seven hundred and eighteen acre area after the Secretary has determined that such uses have ceased on that tract. The map and a description of the boundaries of the areas designated by this section as wilderness shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of the Interior, and in the office of the Superintendent of the Cumberland Island National Seashore.

(b) Within six months after the enactment of this Act, a map and a description of the boundaries of the Cumberland Island Wilderness shall be filed with the Energy and Natural Resources Committee of the United States Senate and with the Interior and Insular Affairs Committee of the United States House of Representatives. Such map and description shall have the same force and effect as if included in this Act, except that correction of clerical and typographical errors in such map and description may be made.

(c) The wilderness area designated by this section shall be known as the Cumberland Island Wilderness. Subject to valid existing rights, the wilderness area shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and where appropriate, any reference in that Act to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

Approved September 8, 1982.

Cumberland Island Wilderness Boundary Adjustment Act of 2004 revised the wilderness boundary to encompass 9,886 acres of designated wilderness and 10,500 acres designated as potential wilderness

SEC. 145. CUMBERLAND ISLAND WILDERNESS BOUNDARY ADJUSTMENT. (a) IN GENERAL.—Public Law 97–250 (96 Stat. 709) is amended by striking section 2 and inserting the following:

“SEC. 2. CUMBERLAND ISLAND WILDERNESS.

“(a) DEFINITIONS.—In this section:

“(1) MAP.—The term ‘map’ means the map entitled ‘Cumberland Island Wilderness’, numbered 640/20,038I, and dated September 2004.

“(2) SECRETARY.—The term ‘Secretary’ means the Secretary of the Interior.

“(3) WILDERNESS.—The term ‘Wilderness’ means the Cumberland Island Wilderness established by subsection (b).

“(4) POTENTIAL WILDERNESS.—The term ‘Potential Wilderness’ means the 10,500 acres of potential wilderness described in subsection (c)(2), but does not include the area at the north end of Cumberland Island known as the ‘High Point Half-Moon Bluff Historic District’.

“(b) ESTABLISHMENT.—

“(1) IN GENERAL.—Approximately 9,886 acres of land in the Cumberland Island National Seashore depicted on the map as ‘Wilderness’ is designated as a component of the National Wilderness Preservation System and shall be known as the ‘Cumberland Island Wilderness’.

“(2) EXCLUSIONS.—The 25-foot wide roadways depicted on the map as the ‘Main Road’, ‘Plum Orchard’, and the ‘North Cut Road’ shall not be included in the Wilderness and shall be maintained by the Secretary for continued vehicle use.

“(c) ADDITIONAL LAND.—In addition to the land designated under subsection (b), the Secretary shall—

“(1) on acquisition of the approximately 231 acres of land identified on the map as ‘Areas Become Designated Wilderness upon Acquisition by the NPS’; and

“(2) on publication in the Federal Register of a notice that all uses of the approximately 10,500 acres of land depicted on the map as ‘Potential Wilderness’ that are prohibited under the Wilderness Act (16 U.S.C. 1131 et seq.) have ceased, adjust the boundary of the Wilderness to include the land.

“(d) AVAILABILITY OF MAP.—The map shall be on file and available for public inspection in the appropriate offices of the National Park Service.

“(e) ADMINISTRATION.—Subject to valid existing rights, the Wilderness shall be administered by the Secretary, in accordance with the applicable provisions of the Wilderness Act (16 U.S.C. 1131 et seq.) governing areas designated by that Act as wilderness areas, except that—

“(1) any reference in such provisions to the effective date of that Act shall be deemed to be a reference to the effective date of this Act; and

“(2) where appropriate, any reference in that Act to the Secretary of Agriculture shall be deemed to be a reference to the Secretary.

“(f) EFFECT.—Any person with a right to utility service on Cumberland Island on the date of enactment of this subsection shall continue to have the right to utility service in the Wilderness after the date of enactment of this subsection.

“(g) MANAGEMENT PLAN FOR ACCESS TO MAIN ROAD AND NORTH CUT ROAD.—Not later than 1 year after the date of the enactment of the Cumberland Island Wilderness Boundary Adjustment Act of 2004, the Secretary shall complete a management plan to ensure that not more than 8 and not less than 5 round trips are made available daily on the Main Road north of the Plum Orchard Spur and the North Cut Road by the National Park Service or a concessionaire for the purpose of transporting visitors to and from the historic sites located adjacent to Wilderness.”.

(b) TOURS OF CUMBERLAND ISLAND NATIONAL SEASHORE.—Section 6 of Public Law 92–536 (86 Stat. 1066) is amended—

(1) in subsection (b), by inserting “, except as provided in subsection (c),” before “no development of the project”; and

(2) by adding at the end the following:

“(c) TOURS OF THE SEASHORE.—Notwithstanding subsection (b), the Secretary may enter into not more than 3 concession contracts, as the Secretary determines appropriate, for the provision of tours for visitors to the seashore that are consistent with—

“(1) this Act;

“(2) the Wilderness Act (16 U.S.C. 1131 et seq.); and

“(3) Public Law 97–250 (96 Stat. 709).”.

(c) SHORT TITLE.—This section may be cited as the “Cumberland Island Wilderness Boundary Adjustment Act of 2004”.

SEC. 146. Notwithstanding any other provision of law, the National Park Service final winter use rules published in Part VII of the Federal Register for November 10, 2004, 69 Fed. Reg. 65348 et seq., shall be in force and effect for the winter use season of 2004–2005 that commences on or about December 15, 2004.

## Appendix B: Inventory of Special Mandates and Administrative Commitments

Name	Agreement Type	Start Date / End Date	Stakeholders	Purpose	Notes
Twelve retained rights	Deeds	Varied	Retained rights holders	The remaining 12 agreements (deeds) are all life estates and they establish rights of use and occupancy until they expire whereupon, they will transfer into full custody of the National Park Service.	Each of the 12 reserve agreements is unique. Parties involved in an agreement may range from a single person to multiple individuals spanning multiple generations. Properties vary in size from one-third of an acre to 186 acres, and may include just a small residential structure or as many as nine houses with additional outbuildings. The reserve tract may also have special considerations such as historic properties or a location within the Cumberland Island Wilderness. Specific terms within the agreements such as the ability/approval to make property modifications, dock privileges, road access, etc., are also varied.
2004 wilderness boundary adjustment	Legislation	2004 / Ongoing	General public	Mandates motorized tours to cultural and natural sites on the north end of the island.	
NPS-SWFLANT Interagency Agreement	Interagency agreement with U.S. Navy	2011 / Indefinite	Navy	NPS provides law enforcement support to protect strategic assets and high value units of the Strategic Weapons Facility, Atlantic Fleet, U.S. Navy.	The U.S. Navy provides funding for NPS rangers to support their efforts.

Name	Agreement Type	Start Date / End Date	Stakeholders	Purpose	Notes
Tri-agency agreement	Interagency agreement	Unknown / Ongoing	Osceola National Forest, Okefenokee National Wildlife Refuge, Timucuan Ecological and Historic Preserve, Cumberland Island National Seashore	Allows collaborative resource use and mutual resource support for wildland fire.	It is renewed annually.
Georgia Forestry Commission - NPS Wildland Fire Memorandum	Memorandum of understanding and annual operating plan	Unknown / Ongoing	Cumberland Island and Georgia Forestry Commission	Allows collaborative resource use and mutual resource support for wildland fire.	It is renewed annually.
General agreement between National Park Service and Camden County Fire Rescue	General agreement	Unknown / Ongoing	Cumberland Island and Camden County Fire Rescue	Mutual assistance in wildland and structural fire suppression actions on lands within Cumberland Island National Seashore's boundaries and within Camden County, Georgia.	It is renewed annually.
Agreement with Eastern National	National cooperating agreement with National Park Service	August 31, 2009 / Ongoing	NPS (Southeast region) and Eastern National	Eastern National has an agreement with the National Park Service to provide educational and monetary support for the park, and provide educational materials for retail sale to the visitor.	CC-SER001-09 Concessions contract.

## Appendix C: Cumberland Island National Seashore Public Involvement Summary

Although the foundation document is not a decision-making document and does not require a formal process for public involvement, national park units may engage the public in a variety of ways during the preparation of the document. While many parks involve the public at the end of the process by sharing the completed foundation document with stakeholders and the general public, Cumberland Island National Seashore chose to involve the public early in the development of the foundation document by asking the public to answer four topic questions about the park's importance, challenges, and future opportunities. These four topic questions and a summary of the responses received are included below. Public feedback was compiled and summarized in a public comment report that served as the public voice in a foundation workshop conducted by National Park Service staff January 29–31, 2013. The information and recommendations heard during the public comment process have been incorporated into the final foundation document for Cumberland Island National Seashore.

Feedback was received in several ways during the official public comment period, which opened on December 11, 2012, and closed on January 11, 2013. The topic questions were posted on the NPS Planning, Environment and Public Comment (PEPC) website, while comment cards were sent out to 152 stakeholders on the park's mailing list and were posted at the park visitor center. The National Park Service also submitted a press release to the local and regional news media inviting the public to provide comments. A total of 63 correspondences were received through the PEPC site, by email, or by mail. In addition, 31 people attended a public open house held at the Cumberland Island National Seashore Visitor Center on January 28, 2013. The open house was hosted by the superintendent of Cumberland Island National Seashore and other National Park Service staff, who recorded public feedback on the four topic questions during the open house.

Each of the four topic questions presented to the public is listed below followed by a summary of the corresponding responses. Correspondences were received from such organizations as the Georgia Conservancy, City of St. Marys, St. Marys Convention and Visitor Bureau, St. Marys Earthkeepers, Boy Scouts of America, Partners in Preservation, The Wilderness Society, The Greyfield Inn, Maine Preservation, Wild Cumberland, The National Trust for Historic Preservation, National Parks Conservation Association, and Cumberland Island residents.

### Topic Question 1: What is most important about Cumberland Island National Seashore?

Natural resources and the wilderness were the most often identified important features of Cumberland Island National Seashore, including the abundance of wildlife, biological diversity, pristine beaches, the old growth maritime forest, and natural ecosystems and geological processes. Commenters also expressed a keen interest in how the wilderness plays into providing solitude and recreation in a pristine landscape with natural soundscapes, often focusing on how the island is protected from development. A handful of commenters expressed that the daily visitor quota to the island is extremely important in protecting the recreational experience as well as the resources. Cultural resources were also identified as important, and a number of commenters mentioned the cultural landscapes and historic structures in particular, such as Plum Orchard, Dungeness Ruins, the Grange, and cemeteries. Commenters valued that the seashore encompasses histories of American Indians, Spanish warriors and priests, British soldiers, American colonists, plantation owners, enslaved Africans, and wealthy families whose descendants have occupied the island for generations.



### **Topic Question 2: What should the American people know about Cumberland Island National Seashore? What are its most important stories?**

Commenters frequently described the impressive breadth of history evident at Cumberland Island National Seashore as something Americans should be aware of. Commenters cited the diversity of histories that can be told from the island, including how the interaction between humans and their natural environment on the island evolved to create a special place. Specific examples of stories and events that can be told through Cumberland Island National Seashore were listed by commenters and vary from American Indians, to the Spanish and English occupation of the island, enslaved Africans and their emancipation and colony, and the Carnegie family.

Commenters also described the island wilderness as a shelter to wildlife and a bastion of peace and serenity for visitors to the island. The natural history of the island was encouraged to be shared with the American people, as well as the story of preservation of the island. Commenters provided details to be told with the preservation story, including how those with the common goal of conservation fought to create the National Seashore, the designation of the wilderness area, and the UNESCO International Biosphere Reserve designation.

### **Topic Question 3: What are the greatest threats to Cumberland Island National Seashore?**

The lack of funds was cited most often as the greatest threat to Cumberland Island. Additionally, commenters noted a perceived lack of funding for sufficient preservation of historic structures. Many commenters pointed out that the National Park Service should seek to strengthen partnerships in order to sufficiently care for the cultural and natural resources of the island. Increased visitation was also a concern to commenters, including the perceived harmful effect of increased commercial tours and use of vehicles on the island. Many commenters also were concerned about threats to the environment, including refuse on the island, invasive species, climate change, sea-level rise, air pollution, and light pollution from Kings Bay.

### **Topic Question 4: What opportunities for visitor experiences, recreation, or resource protection efforts would you like to see at Cumberland Island National Seashore?**

Commenters most often recommended increased interpretive and educational opportunities. These included educational opportunities geared toward children focused on conservation, science, and cultural resources, better and more frequent tours of the historic homes on the island, and better information to be provided to visitors during the ferry ride. Suggestions were made for changing the visitor quota, with some commenters suggesting that the quota should be lower to preserve the resources of the island, and others promoting the allowance of more visitors on a daily basis. Many commenters suggested that the buildings on the island be put to a number of different uses, including housing research institutions and visiting research, for visitor overnight accommodations, or for special events. Many commenters suggested that the island should have increased wilderness and natural resource protection, often by limiting the commercial tours, the use of vehicles, and the number of touring boats.

## Appendix D: Excerpts from Basics for Wilderness Stewardship

### Background Wilderness Information

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

### History of Land Status and Legislation

Cumberland Island is the southernmost barrier island off the Georgia coast and is separated from the mainland by the Cumberland River and Cumberland Sound, both of which are traversed by the Intracoastal Waterway. Cumberland Island National Seashore (CUIS or the Seashore) is located south of Jekyll Island, Georgia, and north of Amelia Island, Florida, and consists of Little Cumberland and Cumberland islands. The two islands are separated by Christmas Creek and its expanse of salt marsh. Cumberland Island is far larger than its neighbor to the north, and is predominately administered by the National Park Service. Although included within the Seashore boundary, Little Cumberland is privately owned and not open to the public. Cumberland Island is approximately 17.5 miles long, ranging from 0.5 to 3 miles wide, and totals 36,415 acres of which 16,850 are marsh, mud flats, and tidal creeks. The Seashore represents one of the finest examples of a primitive barrier island on the Atlantic Coast.

The Wilderness Act, signed into law in 1964, created the National Wilderness Preservation System and recognized wilderness as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” The act further defined wilderness as “an area of undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions. . .” The act mandates that the Secretary of the Interior examine roadless areas larger than 5,000 acres within national park units and suggest those that should be included in the National Wilderness Preservation System.

Public Law 97-250 (the Act of September 8, 1982), as amended by the Cumberland Island Wilderness Boundary Adjustment Act of 2004 (P.L. 108-447, December 8, 2004), established the Cumberland Island Wilderness as a component of the National Wilderness Preservation System. Approximately 9,886 acres on the north half of Cumberland Island are legislatively designated as wilderness and an additional 10,500 acres as potential wilderness. In total, approximately 20,386 acres at the Seashore are managed to protect wilderness character, which represents approximately 56% of the upland and marsh within the Seashore's boundary. The wilderness area includes most of the Seashore north of Stafford Plantation, with the exception of the central and eastern portions of the High Point-Half Moon Bluff Historic District and the uplands on Little Cumberland Island. The 2004 legislation excluded three 25-foot-wide road corridors from the wilderness along the Main Road, Plum Orchard Spur, and North Cut Road. Congress directed that these corridors be maintained for continued vehicle use. The Cumberland Island wilderness legislation mandates that the Seashore's designated wilderness will be permanently preserved in its wilderness condition.

### Current Land Status, Boundary Descriptions, and Map

As noted above, the Cumberland Island Wilderness encompasses approximately 9,886 acres of designated wilderness and about 10,500 acres of potential wilderness. 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 includes private property, State-owned intertidal areas, and areas that are in Federal ownership but are subject to retained rights. The NPS can convert potential wilderness to designated wilderness via a notice in the *Federal Register* when nonconforming uses or conditions have ceased. A large part of the potential wilderness at Cumberland Island is state-owned salt marsh.

A map of the Cumberland Island Wilderness is provided below.



Produced by Denver Service Center Planning Division

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## 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<sup>1</sup>:

- **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 (NPS) has defined a fifth quality, “other features,” to capture elements that aren’t 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 Cumberland Island Wilderness. The document was created through collaboration by NPS staff and is a record of the shared understanding of wilderness character exemplified by Cumberland Island National Seashore.

This narrative serves as a starting point for a wilderness stewardship plan as well as a starting point for discussion 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.

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1. For more details on wilderness character see “Keeping it Wild in the National Park Service. A User Guide to Integrating Wilderness Character into Park Planning, Management, and Monitoring” (NPS 2013) and “Keeping It Wild: An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System” (Landres 2008; available online at: <http://leopold.wilderness.net/pubs/654.pdf>)

## Overview of Cumberland Island Wilderness

The designated portion of the Cumberland Island Wilderness consists primarily of upland maritime forest and a long line of dune fields to the east. This core area is bordered on the north by the High Point – Half Moon Bluff Historic District, on the east by a wide sand beach, on the south by former pastures and lightly developed areas, and on the west by extensive areas of salt marsh. The eastern wilderness boundary is the mean high tide line. Accordingly, the dunes on the east side lie within designated wilderness, but the beach itself does not. The salt marsh on the west also lies within the wilderness boundary, but a large part is owned by the State of Georgia. This area therefore constitutes potential wilderness.

The maritime forest is traversed by the Main Road, a historic dirt track that runs the length of the island from Dungeness on the south to the Cumberland Wharf on the north. For more than 20 years a long segment of this road was included within the wilderness proper, but in 2004 Congress acted to exclude the Main Road from designated wilderness (see Public Law 108-447 (December 8, 2004)). The Cumberland Island Wilderness is now divided for its entire length by a 25-foot right-of-way corridor that is defined by the Main Road. Two other dirt roads (Plum Orchard Road and North Cut Road) are also excluded from designated wilderness.

Cumberland Island National Seashore is open year round with the exception of December 25th. Under the Seashore's general management plan (1984), visitation to Cumberland Island is capped at approximately 300 people per day. In 2012, visitation to Cumberland Island was 39,677 people. Only a small percentage of the Seashore's visitors venture into designated wilderness. Most visitors travel to Cumberland Island for the day and spend the bulk of their time on the southern portion of the island, where the concessioner-operated ferry lands. Peak visitation is during spring break (March–May).

Visitor use of the wilderness consists primarily of backpacking and day-hiking. Most visitation to the wilderness takes place during the spring and fall. Visitation is light, and substantial opportunities exist for solitude.



## Natural Quality

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

The Cumberland Island Wilderness is literally and figuratively a cross-section of Cumberland Island National Seashore. As such, it reflects Cumberland's exceptional quality among coastal barrier islands, displaying the greatest diversity of habitats and biotic communities of any of Georgia's coastal islands. Extensive *Spartina* marshes and tidal creeks cover the western shoreline of the wilderness, providing highly productive estuarine nursery and feeding grounds for juvenile fish, shrimp, crabs, and other invertebrates. Upland forest communities comprise a large portion of the island. Oak and pine dominate most mature forests, and saw palmetto is a common understory plant. Additionally, the wilderness has a sizeable acreage of scrub/shrub habitat supporting a variety of unique plant species. Surface aquatic systems are extensive and include freshwater lakes, ponds, and sloughs with highly fluctuating water levels. A continuous, stable dune ridge has reached extraordinary heights along the eastern shoreline. An expansive dune system supports dynamic dune fields, broad meadows, and sparse stands of grasses, forbs, and sedges.

The aquatic and terrestrial fauna of the wilderness are diverse. More than 300 bird species use the seashore at various times of the year, and more than 100 species are known to nest there. Bird species that use the seashore at various times of the year include the bald eagle, federally listed piping plover, and wood stork. The island provides habitat for a variety of mammals including the white-tailed deer, raccoon, river otter, and bobcat. More than 50 species of herpetofauna are present. American alligators are abundant, and the nesting population of the federally threatened loggerhead sea turtle is the most significant along the Georgia coast.

While natural processes are generally the driving force within the wilderness a number of human-induced factors have altered and in some cases continue to alter the natural character. Much of the forested portion of the wilderness had been historically logged, grazed and/or cultivated. Thus, the overwhelming majority of today's interior vegetation communities have been influenced by human disturbance to one degree or another. Roadbeds, causeways, fences, power lines and right-of-ways, ditches, and irrigation networks continue to fragment landscapes and/or alter the hydrology in places. Developed, residential areas within the wilderness also have the potential to disrupt natural processes. Beach driving, albeit outside the wilderness boundary, is disruptive to wildlife in the adjoining upper beach slope and dunes.

Perhaps the most pervasive impact to the natural character of the wilderness has been the persistent suppression of wildland fire. These management actions have inhibited the natural fire regime of the wilderness, altering the quality and quantity of habitat while producing heavy vegetative fuel loads that could produce massive, stand replacing fires. Restoration of a more natural fire regime would do much to recover vegetative communities that more closely approximate pre-settlement conditions. Wildfire for multiple resource benefits and prescribed fire are important in that restoration process.

Non-native species have a profound effect on the natural quality of the Cumberland Island Wilderness. Feral populations of hogs and horses roam freely on the island, and while Cumberland Island National Seashore has established the objective of eradicating the hog population, feral horses currently are not managed. Coyotes have become established on the island and have quickly become a threat to native species. Laurel wilt disease, borne by a nonnative beetle, has virtually extirpated the mature red bay trees on the island, wiping out a prevalent mid-story species.

## Undeveloped

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

Cumberland Island is the largest island on the coast of Georgia and its size is unusual for a barrier island on the east coast. By and large the island is relatively undeveloped and most of the Cumberland Island Wilderness is undeveloped. However, the area has a long history of human occupation and use, and some residual development exists within the wilderness boundary. The most prominent development consists of a small number of residential structures on reserved estates, and the dirt roads leading to them. In addition, the Main Road, although technically outside of designated wilderness, divides the wilderness and gives the area a more developed feel than is typical in most wilderness areas. The undeveloped quality will improve over time as reserved estates come into full ownership of the National Park Service and associated structures are removed.

Evidence of past human activities can be found in parts of the wilderness, including dumps, causeways, farm structures, abandoned wells, and barbed-wire fences. The undeveloped quality is also degraded in places by features such as communication equipment, utility corridors, and research installations. Electrical service for the entire island, as well as Little Cumberland Island, comes from the mainland above ground into the wilderness and then is distributed through a network of underground cables and above ground junction boxes. On rare occasions, the authorized use of motorized equipment (e.g., chainsaws, ATVs, vehicles, etc.) by park personnel will degrade this quality. Such usage occurs either during emergency incidents or is authorized via a minimum requirements analysis as the minimum tool to implement a planned activity.

As a result of Congress' acknowledgement of the legal rights of retained rights holders and landowners, the imprint of humans' work is noticeable in a number of ways other than authorized NPS management activities. Retained rights holders legally have houses and associated structures in the wilderness that, although authorized, still degrade the wilderness character. Some who retain rights on the island use off-road vehicles (ORVs) as a mode of transportation. The tracks of these vehicles can be seen even when the vehicles themselves cannot. Two east-west roads between the Main Road and the beach, as well as other routes, are used by vehicles of retained rights holders. Vehicles can also be seen from the wilderness travelling up and down the beach.

Several developed areas near the wilderness may degrade the undeveloped quality, and affect the soundscape, viewshed, and night sky. These include overflights in and out of Jacksonville International Airport, military and private aircraft overflights, activities at the U.S. Navy base at Kings Bay, boat and vessel traffic, and visible development at Fernandina Beach, Florida, as well as Camden County, Jekyll Island, and Brunswick in Georgia. The quality could be degraded substantially by residential and/or industrial development to mainland areas that are at present sparsely developed.



## Untrammelled

**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 untrammelled quality requires managers to restrain themselves, rather than restraining the wilderness. Often, upholding the untrammelled quality can detract from another wilderness quality, such as “naturalness,” or vice-versa. For example, exotic species may be removed in order to attain natural species composition, which would in turn be a manipulation of the current wilderness.**

Much of the upland portion of the Cumberland Island Wilderness is a landscape in transition. The island had been significantly transformed during periods of logging, agriculture, and other forms of development. Those activities have since disappeared allowing time and environmental forces to return the landscape to a natural condition, albeit not necessarily the condition that existed pre-settlement. The wilderness has been and continues recovering with little direct human intervention or restoration and is generally free from modern human control. However, there are some activities that directly or indirectly impact the untrammelled quality of the wilderness.

Most notable among these management actions has been the suppression of wildland fires, which has significantly interfered with the natural fire regime that would be a part of the island and wilderness ecological processes. Fire suppression activities have inhibited and/or altered the evolution of natural habitats and allowed the accumulation of heavy vegetative fuel loads, which could result in extreme fire conditions and stand replacing fires.

The NPS also conducts other activities that, while they are not necessarily targeted toward manipulating the wilderness, nonetheless have an effect on the untrammelled quality. Among these are the feral hog eradication program that requires persistent efforts island-wide and the sea turtle nest monitoring program, which is a daily operation throughout the nesting season to protect threatened and endangered species. Other authorized but less frequent activities for the preservation and protection of wilderness resources include efforts such as archeological investigations, scientific investigations/monitoring, exotic plant management, restoration projects, and protection of wildlife (shorebirds). Management actions, such as trail maintenance and hazardous tree removal, are carried out to benefit visitors to the wilderness. More intense measures may be implemented to maintain vehicular access along roads/trails in accordance with reserved agreements for private use and occupancy. In addition, emergency operations such as search and rescue, firefighting, and hurricane evacuation may occur but on an infrequent basis.

The remnants of past human endeavors continue to influence natural processes even though they may have been abandoned or are otherwise unmaintained. Features such as borrow pits, ditches, and free-flowing, abandoned artesian wells have created artificial micro-habitats and water sources. Causeways, many of which are still used for trails and roads, at the least have displaced wetlands on a localized level and on a larger scale some may be altering hydrology over hundreds of acres. Channels, ditches, and levees that were built to manage water flow for agriculture are still having an effect in areas that are now wilderness. The presence of introduced, nonnative species such as horses and hogs continues to affect the natural environment as well.

Management actions in the wilderness sometimes degrade the untrammelled quality, but many are authorized actions by NPS personnel, and will only be taken when determined to be necessary for the administration and preservation of wilderness resources (natural and cultural) and wilderness character, as well as the administration of retained rights. These activities include important functions such as monitoring and protecting endangered species, accessing and preserving cultural resources, transporting volunteers, and managing fires. Although the list is long, many of the activities do not occur frequently. Some activities, like emergency responses and hurricane evacuation, will happen only rarely. On the other hand, turtle monitoring takes place daily during turtle nesting season.

## 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.**

Visitors to the wilderness come to experience the area’s opportunities for solitude, risk, and challenge. Its beaches, maritime forest, diversity of flora and fauna, and cultural resources are among the finest and most pristine on any barrier island of this nation. Visitors may wander for days and encounter only island wildlife during their wilderness experience. The wilderness itself is miles from the ferry drop-off and generally visited only by determined hikers and backpackers. The result is a memorable beginning to a visitor’s wilderness experience and an enhanced sense of solitude on the north end of the island.

Miles of hiking trails meander about maritime forests, interior wetlands, marsh ecosystems, dune complexes, and beaches accessible only by foot. An extensive network of trails provides a path through the heart of the island. For years hikers have traversed these trails, staying at the three designated backcountry campsites—Hickory Hill, Yankee Paradise, and Brickhill Bluff. These campsites have no facilities other than a dedicated or nearby water well (water must be treated) and campfires are not allowed. Hikers walk the trails, stroll along a long stretch of undeveloped beach, and face the many natural challenges of camping on a barrier island. Until recently, access for wilderness visitors has been limited to hikers. Within the last several years, kayakers, canoers, and other boaters have found the Cumberland Island Wilderness a desirable destination, and have been entering the wilderness at various points along the western shoreline.

Though the island offers solitude to many, there can be detractors from the visitor experience. In some instances, the sights and sounds of the natural setting may be affected by industrial and military facilities to the south and west, persistent mid- and low-level aircraft overflights, and vessel traffic on the waterways surrounding the island. Likewise, any vista that takes in any area outside the wilderness to the north, south, and west will be met by the products of man, whether it be residential, industrial, military, recreational, structural, transportation, or otherwise. Views to the east out over the ocean will be persistently met near and far with vessel and aircraft traffic. Additional impacts stem from day-to-day human activities associated with park management, occupation of the reserved estates, and operation of the “Lands and Legacies Tour.” Beach driving, which can be seen and heard from the wilderness, is allowed by state law and regulated by the Georgia Department of Natural Resources. The constant presence of beach trash may also detract from the visitor experience.

### Issues for Wilderness Planning

Please see the previous discussion of key park issues in “Identification of Key Issues and Associated Planning and Data Needs,” many of which relate to the Cumberland Island Wilderness. The document also includes a detailed assessment of planning and data needs prepared by the Southeast Region and Cumberland Island National Seashore staff.



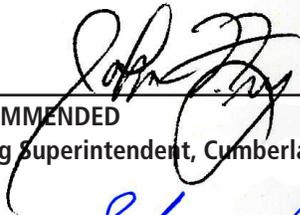
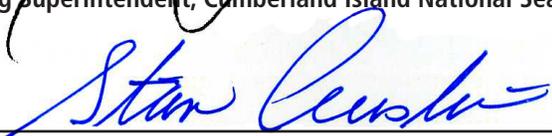
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**Southeast Region Foundation Document Recommendation  
Cumberland Island National Seashore**

February 2014

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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.

	<i>7 JAN 2014</i>
RECOMMENDED Acting Superintendent, Cumberland Island National Seashore	Date
	<i>2-4-14</i>
APPROVED 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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# Foundation Document • Cumberland Island National Seashore

