



# Foundation Document

## Cape Lookout National Seashore

North Carolina

October 2012





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*Shackleford Banks*

## Introduction

Every unit of the national park system is required to have a formal statement of its core mission that will provide basic guidance for planning and management decisions—a foundation for planning and management. Increasing emphasis on government accountability and restrained federal spending demand that stakeholders are aware of the purpose, significance, interpretive themes, fundamental resources and values, and special mandates and administrative commitments of a park unit, as well as the legal and policy requirements for administration and resource protection that factor into management decisions.

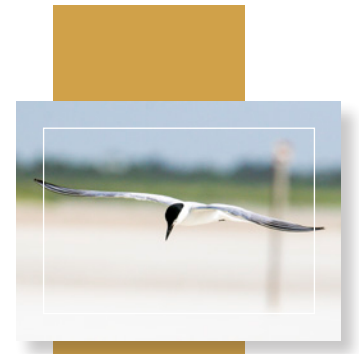
The process of developing a foundation document provides the opportunity to gather together and integrate all varieties and hierarchies of information about a park unit. Next, this information is refined and focused to determine what are the most important attributes of the park. The process of preparing a foundation document aids park managers, staff, and stakeholders in identifying information that is necessary for future planning efforts.

A foundation document serves as the underlying guidance for management and planning decisions for a national park unit. It describes the core mission of the park unit by identifying the purpose, significance, fundamental and important resources and values, interpretive themes, assessment of planning and data needs, special mandates and administrative commitments, and the unit's setting in the regional context.

The foundation document can be useful in all aspects of park management to ensure that primary management objectives are accomplished before addressing other factors that are also important, but not directly essential to achieving the park purpose and maintaining its significance. Thus, the development of a foundation document for Cape Lookout National Seashore is necessary to effectively manage the park over the long term and protect park resources and values that are integral to the purpose and identity of the park unit.

This foundation document was developed as a collaborative effort among park staff and regional staff, with the assistance of staff from the National Park Service (NPS) Denver Service Center (DSC). A workshop to facilitate this process was held April 17–19, 2012, at Harkers Island, North Carolina. A complete list of attendees and preparers is included in part 3 of this document.

The park atlas is also a part of the foundation project. It is a geographic information system (GIS) product that can be published as a hard copy paper atlas and as electronic geospatial data in a Web-mapping environment. The purpose of the park atlas is to act as a reference for park projects and to facilitate planning decisions as a GIS-based planning support tool. The atlas covers various geographic elements that are important for park management such as natural and cultural resources, visitor use patterns, and facilities. It can be developed as part of a planning project (e.g., general management plan, foundation document), although it can also be designed as an independent product. The park atlas is available at <http://insideparkatlas.nps.gov/viewer/>.



## Part 1: Core Components

All foundation documents include the following core elements:

The park purpose is the specific reason(s) for establishing a particular park. A park purpose statement is grounded in a thorough analysis of the legislation (or executive order) and legislative history of the park, and may include information from studies generated prior to the park's establishment. The purpose statement goes beyond a restatement of the law to clarify assumptions about what the law means in terms specific to the park.

The significance statements express why the resources and values of the park are important enough to justify national park designation. Statements of park significance describe why an area is important within a global, national, regional, and systemwide context. Significance statements are directly linked to the purpose of the park and are verified by data or consensus that reflect the most current scientific or scholarly inquiry and cultural perceptions because the resources and values may have changed since the park was established.

Interpretive themes connect park resources to relevant ideas, meanings, concepts, contexts, beliefs, and values. They support the desired interpretive objective of increasing visitor understanding and appreciation of the significance of park resources. In other words, interpretive themes are the most important messages to be conveyed to the public about the park. Interpretive themes are based on park purpose and significance.

Fundamental resources and values are features, systems, organisms, processes, visitor experiences, stories, scenes, sounds, smells, or other attributes of the park that merit primary consideration during planning and management because they are essential to achieving park purpose and maintaining park significance.

Other important resources and values are resources and values that are determined to be important and integral to park planning and management, although they are not related to park purpose and significance.



*Loggerhead sea turtle hatchlings*

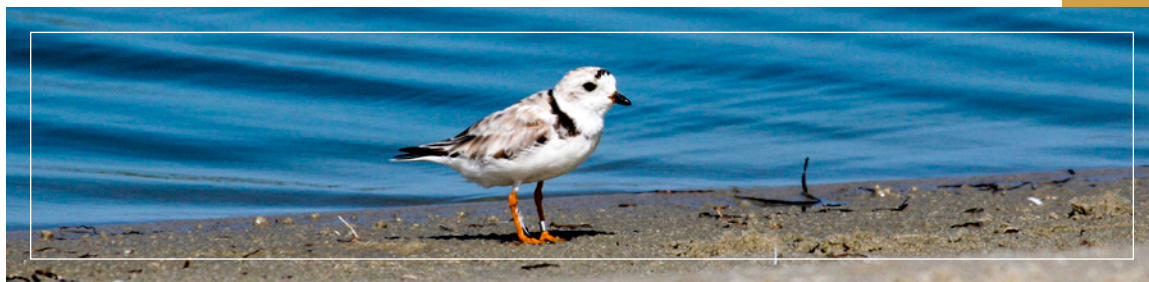
## Brief Description of Cape Lookout National Seashore

Cape Lookout National Seashore is a narrow ribbon of sand extending from the Ocracoke Inlet at the seashore's northeast boundary to Beaufort Inlet at its southwest terminus. These barrier islands—56 miles long and encompassing 29,000 acres of land and water—consist of wide, bare beaches with low dunes covered by scattered grasses, flat grasslands bordered by dense vegetation, and large expanses of salt marsh alongside the sound. The seashore is a changing environment where nature, when left relatively undisturbed by humans, maintains ecological balance.

Wind, waves, and currents are continually at work reshaping these low-lying islands. One large storm can bring extensive changes. In such an environment only the most tenacious plants can survive the constant battle. Humans, too, have found this environment difficult to survive in, but also benefitted from its protective and bountiful qualities. A 1590 map of Cape Lookout calls the area *promontorium tremendum* (horrible headland) in recognition of the area's treacherous shoals. Behind the islands are sheltered anchorages that can shield a vessel from a Northeaster or, as in World War II, an enemy submarine.

For centuries whaling, fishing, and shipping were important industries on the Outer Banks. Portsmouth Village, chartered in 1753, for example, played a critical role in the conduct of maritime commerce in North Carolina from the colonial period until the outbreak of the Civil War. The village served as a lightering port for heavily loaded ships that could navigate the deep waters of the Atlantic Ocean, but not the shallow waters of the sounds. Goods were unloaded at Portsmouth Village, stored in warehouses, and transported to mainland areas by smaller, more maneuverable boats. In the 19th century, the settlement of Diamond City on Shackleford Banks became famous for the excellent salted mullet it shipped. Marking the shoals and safe channels was crucial to these efforts. The iconic, diagonal checker-patterned lighthouse at Cape Lookout Bight was completed in 1859 to mark the seashore's prominent headland.

Approximately 650,000 people visit the park annually. They come to relax on the beaches, search for seashells, climb the lighthouse, witness the amazing diversity of birds along the Atlantic Flyway, canoe and kayak, fish and hunt. Among the seashore's many natural and recreational attractions, it is also famous for other unique wildlife viewing, including the legislatively protected wild horses of Shackleford Banks. There are no roads or bridges that access the seashore's islands, which truly highlight its primarily undeveloped nature and distinguish Cape Lookout National Seashore as a dynamic national park system unit, where ecological processes dominate.



*Piping plover*

## Park Purpose

Purpose statements identify the specific reason for the establishment of a particular park. Purpose statements are crafted through a careful analysis of the enabling legislation and legislative history that influenced the development of Cape Lookout National Seashore, which was designated on March 10, 1966, when the initial enabling legislation was passed and signed into law (see appendix A for enabling legislation and subsequent amendments). The purpose statement reinforces the foundation for future park management administration and use decisions. The following purpose statement was based on the review of park legislation, previous management documents, and discussions with park staff:

*THE PURPOSE OF CAPE LOOKOUT NATIONAL SEASHORE is to preserve the outstanding natural, cultural, and recreational resources and values of a dynamic, intact, natural barrier island system, where ecological processes dominate.*



*Dunes and Atlantic Ocean from South Core Banks*



## Park Significance

Significance statements express why Cape Lookout National Seashore's resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and systemwide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

The following significance statements have been identified for Cape Lookout National Seashore. (Please note that the statements are in no particular order):

- Cape Lookout National Seashore, 56 miles of barrier islands off the North Carolina coast, is an outstanding example of a dynamic, intact, natural barrier island system, where ecological processes dominate.
- Cape Lookout National Seashore is one of the few remaining locations on the Atlantic coast where visitors can experience and recreate in a primarily undeveloped, remote barrier island environment, which can be reached only by boat.
- Cape Lookout National Seashore preserves a diversity of coastal habitats, which support aquatic and terrestrial plant and animal life, including several protected species, such as piping plovers, American oystercatchers, sea turtles, black skimmers, terns, and seabeach amaranth.
- The free-roaming Shackleford Banks wild horse herd is legislatively protected within Cape Lookout National Seashore.
- Cape Lookout National Seashore contains a rich concentration of cultural resources that tell the history of people living at the edge of the sea, dating from approximately 3000 B.C. to the present.
- The Cape Lookout Lighthouse protected the nation's maritime commerce from one of the most significant hazards of the North Carolina coast—the Cape Lookout shoals.
- Cape Lookout National Seashore preserves Portsmouth Village, a National Register Historic District and unique, intact coastal Carolina community that played a critical role in the conduct of maritime commerce in North Carolina from the colonial period until the outbreak of the American Civil War.
- Cape Lookout National Seashore preserves the Cape Lookout Village, a National Register Historic District that was an important community for local families beginning with establishment of a life-saving station at the Cape in 1886.
- Cape Lookout National Seashore provides an outstanding natural laboratory for studying ecological and geological processes, as well as the effects of climate change and sea level rise on the Atlantic coast.
- Cape Lookout National Seashore provides a remote setting for visitors to experience unobstructed ocean views and one of the darkest publicly accessible areas along the East Coast for nighttime vantages.



## Interpretive Themes

Interpretive themes, which are based on park purpose and significance, provide the basis for interpretive and education programs at Cape Lookout National Seashore. The themes do not include all park elements that can be interpreted, but they do address the ideas that are essential to visitor enjoyment and appreciation of park significance. Effective interpretation is achieved when visitors are able to connect concepts (intangibles) with resources (tangibles) and derive something meaningful from the experience.

Interpretive themes link the tangible values identified by the significance statements and fundamental resources and values to intangible concepts that convey the importance of the park unit. Interpretive themes serve as building blocks upon which interpretive services (e.g., exhibits, audiovisual displays, websites, publications, interpretive programs, social media, etc.) and education programs are based. The long-range interpretation plan for the park unit is a strategic plan that details interpretive themes, establishes visitor experience objectives, and recommends ways to achieve these objectives through interpretive services and education programs.

Cape Lookout National Seashore identified the following interpretive themes in its *Long-Range Interpretive Plan* (June 2011):



## Theme 1: Barrier Island Geology and Geography

*Cape Lookout National Seashore's barrier islands are constantly reshaped by the dynamic relationship between environmental forces and geography, such as the wind, the tremendous energy of waves and storms, global climate change and the accompanying sea level rise, the supply of sand, and the underlying coastal topography.*

*When allowed to respond naturally, these barrier islands are best able to protect the North Carolina mainland from the devastating losses that might otherwise result from hurricanes and other storm surges.*

### Subthemes:

1. Barrier islands are dynamic; they undergo continual change in response to smaller long-term gradual events (tides, winds, global climate change, ocean sea levels) as well as sudden high energy events (storms, hurricanes).
2. The formation, migration, and location of barrier islands is a function of the amount of sand available, the geography and elevation of the coast, the underlying topography of the seabed, and the rise (or fall) of the ocean sea level.
3. Climate change and sea level rise pose some of the most significant practical and civic/governmental policy challenges for management of development on barrier islands and along coastlines throughout the world. Identifying appropriate mechanisms for mitigating human causes of climate change, and appropriate responses to coastal development, may be some of the most critical issues for the next 50–100 years.
4. Undeveloped barrier islands exist in a dynamic balance between the forces (wind, water, and waves) that deposit and erode the sands of the barrier islands and their beaches. This equilibrium can easily be disrupted by human activities such as shoreline development, road building, construction of artificial dunes, jetties, seawalls, and groins and the creation and maintenance of inlets and channels. However, left alone, barrier islands are never permanent, and with rising sea levels, this buffer zone may not exist in the future.
5. The history of barrier island migration is written in the mainland landscape of North Carolina; on the mainland throughout the Coastal Plain and extending into the Piedmont, barrier island remnants can be seen in the shape of the land, a result of advancing and receding prehistoric seas.
6. Plant communities stabilize the islands by trapping the sand, allowing the barrier island to grow in size and elevation, and thus countering the eroding forces of winds, waves, currents, and storms. Human activity, including the introduction of nonnative species, can easily disrupt or change these communities.



## Theme 2: Barrier Island Ecology and Estuaries

*As a consequence of their unique geology, ecology, and undeveloped condition, the barrier islands of Cape Lookout National Seashore are a refuge for plant communities and resident and migratory marine and terrestrial wildlife, including several threatened and endangered species. Together with Cape Hatteras National Seashore, the islands form and shelter the second largest estuarine system in the United States.*

### Subthemes:



1. The NPS decision to maintain the barrier islands of Cape Lookout National Seashore in a largely undeveloped condition, where the effect of human intervention is minimized and natural processes dominate, allows them to serve as a natural laboratory for the study of barrier island dynamics and ecology. In stark contrast, many other coastal barrier islands have been intensely developed, are continually threatened, and are the subject of costly, mostly futile attempts to hold back the sea.
2. Cape Lookout National Seashore's undeveloped barrier islands provide unique and critical habitat for diverse and rare (threatened or endangered) wildlife and plants. Most of these species are specifically adapted to the changing and often harsh marine environment of the islands and are dependent on these habitats for their survival.
3. Recognized as the official North Carolina horse and legislatively protected as a cultural/historical resource, the population of banker ponies on Shackleford Banks is one of the last wild horse populations on the East Coast. Cape Lookout National Seashore combines scientific study with preservation to ensure the survival of a genetically healthy banker horse population while closely monitoring and managing the impact of the horses on the barrier island environment of Shackleford Banks.
4. Second only to the Chesapeake Bay in size, the estuarine system formed and sheltered by the barrier islands of the outer banks provides spawning, nursery, and feeding waters for a host of shorebirds, sea turtles, marine mammals, marine fish, and shellfish species. This critical habitat and the marine organisms that depend on it are increasingly threatened by siltation and nonpoint source pollution from development on the coast and from far inland (such as high fertilizer nutrient levels and runoff from paved roads, parking lots, and sidewalks).
5. Climate change and sea level rise will likely create significant changes in the outer banks barrier island chain, with a predicted long-term collapse of the entire Cape Hatteras section north of Ocracoke inlet, and potential collapse of major portions of the Pamlico Sound estuary.
6. Located where the southbound Labrador Current and the northbound tropical Gulf Stream mix, the waters around Cape Lookout National Seashore host a surprisingly diverse array of sea life, including both northern and tropical fish, whales, seals, sea turtles, and significant deepwater coral beds offshore.

### Theme 3: Cultural Geography

*Since prehistoric times, people have been drawn to the North Carolina coast and barrier islands for sustenance, inspiration, and recreation. The struggle to survive in the harsh coastal environment of the banks fostered the development of island communities with distinctive speech patterns, cultures, folkways, living traditions, and social ideology.*

#### Subthemes:

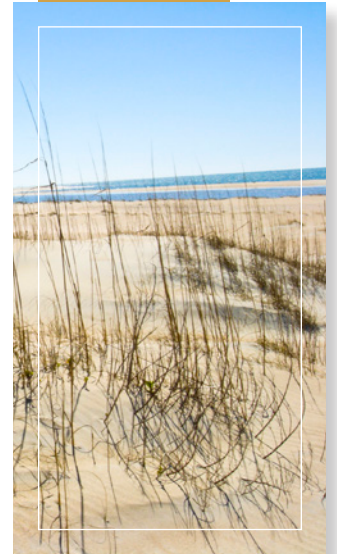
1. Physically isolated from the economic resources of larger communities and farms on the mainland by the sounds' waters, the people making Core Banks and Shackleford Banks their home relied heavily on the immediate resources of the islands and surrounding waters to sustain their lives.
2. The harsh environment and isolation made for a hardy people who were self-reliant and able to adapt to change. In small communities such as these, social rules and norms were adapted to fit the needs of the community—as in the case of women and children having to assume duties and roles that their mainland counterparts were not allowed or expected to fulfill.
3. The changing seasons set the pattern for living along the banks for Native Americans and the settlers who came later. Hunting, fishing, and migrating between the mainland and the islands followed the same ancient rhythms.
4. African Americans who lived along the coast developed maritime skills alongside their European American counterparts and found a measure of acceptance and freedom that was not as common for their counterparts living in the interior of North Carolina.

### Theme 4: People and Commerce at the Edge of the Sea

*Since prehistoric times, humankind has used the waters adjacent to the North Carolina coast for a full range of maritime activities, including sustenance, commerce, transportation, piracy, warfare, and recreation. The sea can be a dangerous place, and the relationship of humankind to the sea has left a rich cultural, historical, and archeological legacy that factors large in the history of the Down East, the state of North Carolina, and the nation.*

#### Subthemes:

1. Since prehistoric times, people using the coastal waters and barrier islands have dealt with conflict, nature and weather, advancements in transportation, human error, and mechanical malfunctions. People have experienced prosperity, but misfortunes also have led to a significant human toll and high economic losses off the shores of the North Carolina barrier islands.
2. The inlets and protected anchorages of Ocracoke, Core Banks, and Cape Lookout Bight have played important roles in wars from the colonial era through World War II. As a result, these areas have seen the construction of fortifications and other wartime preparations in support of the defense of the colony of North Carolina and the nation.
3. The ocean waters off the North Carolina barrier islands became a battleground during World War II with the United States experiencing major losses from German submarine attacks. Due to the need for secrecy, few people outside





the islands knew of the nation's significant loss of lives, ships, and cargoes that occurred during the first months of World War II.

4. Before the advent of railroads and today's jetports and superhighways, most of the nation's wealth and people moved by sail, and later by steamships along the coast. Protecting the shipping lanes that sent commercial products around the world and brought back raw materials from outside the borders was paramount to the economic growth and safety of the developing nation. These shipping lanes continue to be a vital part of the United States economy.
5. Economic losses and loss of life caused by the treacherous shoals and unpredictable weather at the confluence of the Gulf Stream and Labrador Current along the North Carolina coast resulted in a national effort to develop navigation aids such as the Cape Lookout lighthouses and lightships and rescue services such as the U.S. Coast Guard and its predecessor agencies.

### **Theme 5: Recreation, Education, and Visiting Cape Lookout**

*Cape Lookout provides outstanding recreational, educational, and inspirational opportunities in a remote natural setting, inspiring visitors to contemplate their relationship to the natural world, both within the seashore and at home.*

#### **Subthemes:**

1. Cape Lookout National Seashore offers a unique recreational setting where visitors may enjoy noncommercialized and self-reliant outdoor activities in a remote and natural setting.
2. Cape Lookout National Seashore provides an outdoor classroom where visitors may learn about the natural history of coastal North Carolina and the cultural and historic significance of the region. It is an invaluable resource—a living laboratory—for those involved in scholastic and/or recreational education.
3. Cape Lookout National Seashore offers visitors a rare opportunity to step outside the hustle and bustle of a human dominated, controlled world into a world where they, too, are part of nature instead of outside it. The serenity of a Cape Lookout National Seashore experience promotes emotional, spiritual, and inspirational opportunities to connect to this resource.
4. The seashore offers visitors a unique venue and lens through which to study the causes and effects of climate change. The surviving coastal features and landscapes of Portsmouth Village and the Cape Village Historic District provide observable lessons regarding the impact of changing ocean levels. Insights gained can inform future choices made by individuals and all levels of government regarding what is important to protect and the impacts of potential development on treasured natural and cultural features.

## Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance.

The most important responsibility of NPS managers is to ensure the conservation of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. These qualities are called fundamental resources and values. Fundamental resources and values are closely related to legislative purpose, and are more specific than significance statements. FRVs help focus planning and management processes on what is truly significant about the park. If FRVs are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The identification of fundamental and other important resources and values should not be interpreted as meaning that some park resources are not important. This evaluation is made to separate those resources or values that are covered by NPS mandates and policies from those that have important considerations to be addressed in other planning processes.

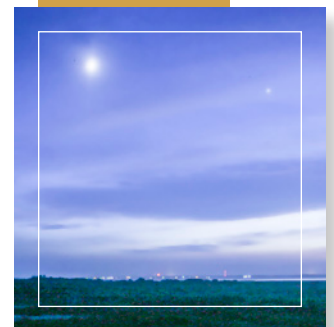
The following fundamental resources and values have been identified for Cape Lookout National Seashore:

### Intact barrier island system driven by coastal geologic processes

The seashore's 56 miles of barrier islands provides one of the best examples of a dynamic coastal barrier island system in the world. The natural interplay of winds, waves, tides, and currents continually restructures the barrier island system. With time, beaches and dunes shift location through erosion and accretion processes. Overwash from severe events, such as hurricanes, can produce more rapid changes, which can cause entire islands to migrate landward. Evidence of these geologic processes underscores the natural forces that created this system, which are not as prevalent on the more developed islands neighboring the seashore.

### Undeveloped character

One of the seashore's most distinguishing values is its primarily undeveloped qualities in contrast to neighboring barrier islands. There are no roads or bridges to the seashore's islands, which contributes to unique visitor opportunities. Indeed, natural processes are central to the visitor experience here. The ocean's power resonates through the sounds of pounding surf along the Core Banks, for example, while few traces of human use are noticeable within Core Sound marshes. Visitors can witness the vast ocean viewshed by day and enjoy some of the darkest night sky vantages along the East Coast by night.



## Lighthouse and other federal maritime structures within the Cape Lookout Village National Historic District

Structures and sites in the national historic district represent over two centuries of federal efforts to protect maritime commerce and human lives at the Cape, including the 1812 lighthouse (site), 1859 lighthouse and light station, 1886 U.S. Life-Saving Station, and the 1917 U.S. Coast Guard Station. The most iconic structure—the 1859 lighthouse—was the first of the four tall brick lighthouses built on the North Carolina coast. The lighthouse, with its unique diagonal checkered daymark, was individually listed on the National Register of Historic Places in 1972. The light station consists of the lighthouse, the keepers' quarters, and associated structures.



## Shackleford Banks horse herd

Shackleford Banks, the southwesternmost barrier island within seashore boundaries, is one of the few places in the eastern United States that visitors can see wild horse herds. The Shackleford horses are protected by federal legislation.

## Portsmouth Village National Historic District

Chartered in 1753 by the North Carolina Colonial Assembly, Portsmouth Village played a critical role in the conduct of maritime commerce in North Carolina from the colonial period until the American Civil War. It remains an intact village, featuring 21 historic buildings and structures.

## Birds

The seashore's location along the Atlantic Flyway provides nesting, resting, and feeding habitat for a diverse assemblage of birds. In 1999, the American Bird Conservancy designated Cape Lookout National Seashore as a Globally Important Bird Area in recognition of the value the seashore provides to bird migration, breeding, and wintering. The seashore is home to the federally listed piping plover. In addition, the seashore provides nesting habitat for several state-listed species, including the common tern, least tern, gull-billed tern, and black skimmer. Solitary nesters, such as the American oystercatcher and Wilson's plover also use Cape Lookout National Seashore as a breeding ground, as well as the red knot, which uses the seashore during spring and fall migrations.

## Sea turtles

Cape Lookout National Seashore is used as nesting habitat by four federally listed sea turtles: the loggerhead, green, leatherback, and Kemp's ridley. One other federally listed sea turtle species, the hawksbill, occupies the surrounding waters.

## Scientific study

The seashore's wealth and diversity of natural and cultural resources provides a premier location to study coastal adaptation. The seashore's resources also serve as a natural laboratory to study barrier island dynamics, climate change, and ecological changes over time.



### Recreational opportunities and experiences in a remote setting

The seashore's recreational opportunities are nationally significant due to the variety and scale afforded by its unique geography and primarily undeveloped character. In addition, multigenerational activities, such as surf fishing, hunting, shelling, and beachcombing celebrate rich cultural traditions.

### Aquatic habitat

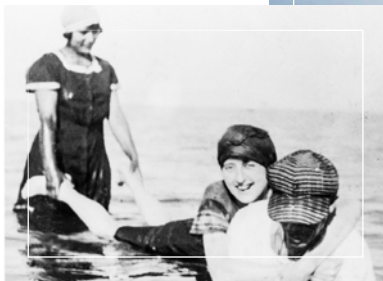
The seashore's wetlands, tidal marshes, seagrass beds, and freshwater ponds support nursery habitat and form the aquatic base of the barrier island ecosystem. Healthy functionality of each component aids the region's overall water quality.

### Terrestrial habitat

Similar to aquatic habitat, the seashore's open beaches, dunes, shrub thickets, and maritime forest stabilize the island's low profile terrestrial existence and provide the ecological foundation for its unique flora and fauna.

### Human connection to the banks

The human connection to the seashore's remote geographic setting provides a link to understanding peoples' ability to adapt to a changing coastal environment isolated from the mainland. The human connection to the banks includes a deep appreciation of community and participation in a variety of multigenerational activities that celebrate rich cultural traditions.



## Other Important Resources and Values

Cape Lookout National Seashore may contain other resources and values that may not be fundamental to the purpose and significance of the park, but are important to consider in management and planning decisions. These are referred to as other important resources and values.

Following are other important resources and values for Cape Lookout National Seashore:

### Archeological sites (prehistoric sites, shipwrecks, cemeteries)

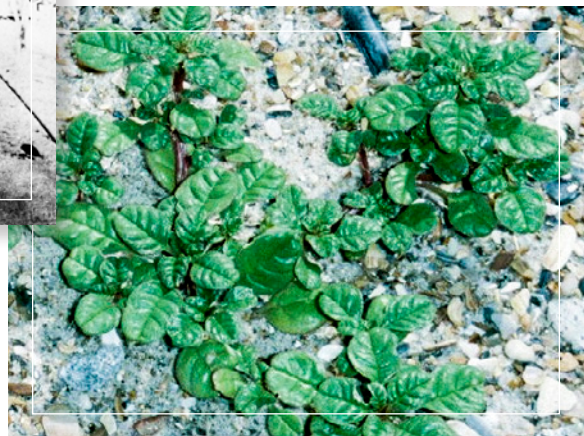
The seashore retains an archeological legacy associated with survival at the edge of the sea. Sites include prehistoric occupation sites, cemeteries at Portsmouth Village Historic District and Shackleford Banks, and sunken ships and cargoes from colonial exploration to losses associated with German submarine attacks during the first months of World War II.

### Diamond City and whaling industry

Shackleford Banks was the site of Diamond City, an abandoned whaling village on its east end that was one of the most distinctive of the pre-1900s “Down East” Outer Banks communities. Few remnants remain of the settlement; however, its story is exemplary of the region’s early commercial whaling industry and the attempt to sustain commerce at the edge of the sea.

### Seabeach amaranth

Seabeach amaranth is another sensitive species supported by the seashore’s unique natural ecosystem. This annual plant is typically found in suitable habitat of overwash fans, sand flats, and low dunes. It is a federally protected species and acts as an efficient sand binder capable of creating mini sand dunes. The species often grows in the same areas selected for nesting by shorebirds such as plovers, terns, and skimmers.



*Seabeach amaranth*

## Part 2: Dynamic Components

Part 2 consists of two components:

- special mandates and administrative commitments
- assessment of planning and data needs

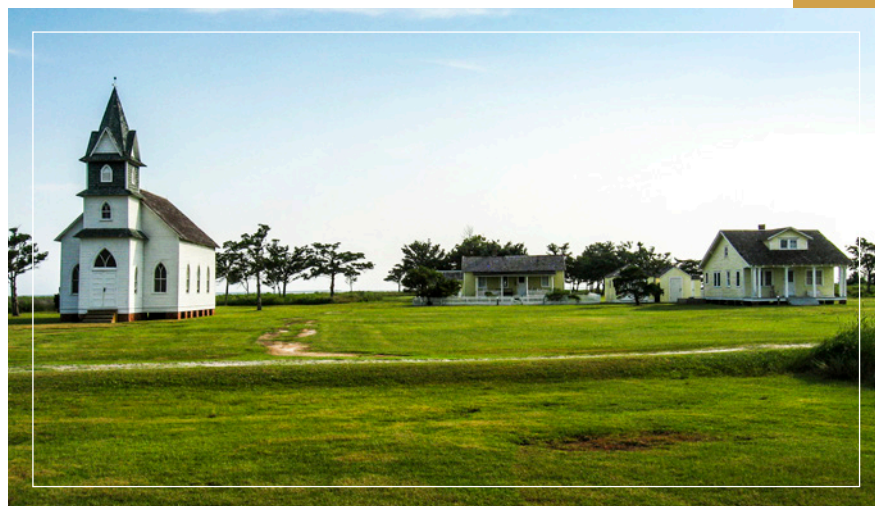
These components may change after this foundation document is published and may need to be updated periodically.

### 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, utilities, and other partnering organizations. Special mandates are requirements specific to a park, which expand on or contradict the legislated purpose of the park unit. They are park-specific legislative or judicial requirements that must be fulfilled, along with the park purpose, even if the requirements do not relate to that purpose.

Administrative commitments in general are agreements that have been reached through formal, documented processes, such as memoranda of agreement. These agreements can form a network of partnerships designed to fulfill the objectives of the park and facilitate working relationships with other organizations. All of these mandates and commitments either dictate some form of management action or will allow particular uses on park lands (e.g., permissible traditional uses, easements or rights-of-way, maintenance needs, use of park facilities or lands, or emergency service responses). Thus, these mandates and commitments are an essential component in the foundation document and in managing and planning for Cape Lookout National Seashore.

For more information about the existing commitments for the park, please see the inventory of special mandates and agreements matrix in appendixes E and F.



*Portsmouth Village*

## Assessment of Planning and Data Needs

Once park purpose and significance statements and fundamental resources and values have been identified, it is important to consider what additional information and planning tasks may be necessary to aid the National Park Service in its mission. The assessment of planning and data needs identifies any inherent conditions or threats contained in the gathered information and determines whether any additional planning steps, data needs, and management efforts may be necessary to maintain or protect the existing fundamental resources and values and other important resources and values.

There are three parts that make up the planning and data needs assessment:

1. analysis of fundamental resources and values
2. identification of key or major parkwide issues that need to be addressed by future planning
3. identification and prioritization of data and planning needs

The analysis of fundamental resources and values and identification of major issues leads up to and supports the identification and prioritization of needed plans and studies.



## Analysis of Fundamental Resources and Values

The analysis of fundamental resources and values articulates the importance of each fundamental resource and value, its current status, potential threats and opportunities, needed data, planning and management decisions, and relevant laws and NPS policies related to management of the resources.

<b>Fundamental Resource or Value: Intact barrier island system driven by coastal geologic processes</b>	
<b>Importance</b>	The seashore's 56 miles of barrier islands provides one of the best examples of a dynamic coastal barrier island system in the world. The natural interplay of winds, waves, tides, and currents continually restructures the barrier island system. With time, beaches and dunes shift location through erosion and accretion processes. Overwash from severe events, such as hurricanes, can produce more rapid changes, which can cause entire islands to migrate landward. Evidence of these geologic processes underscores the natural forces that created this system, which are not as prevalent on the more developed islands neighboring the seashore.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Natural processes persist although some areas are experiencing alterations from human activity (i.e., Shackleford Banks, Ocracoke Inlet, and Barden Inlet)</li> <li>• Primarily undeveloped</li> <li>• Occasional dredging of inlets (Ocracoke, New Drum, Barden, and Beaufort)</li> <li>• Intact and functioning</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Intact and functioning</li> <li>• See appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Impacts associated with maintenance of Beaufort Inlet shipping channel accessing the State Port at Morehead City (i.e., nearshore hydrodynamic impacts from dredging)</li> <li>• Climate change and associated influences (sea level rise, increase in annual temperature)</li> <li>• Seashore development</li> <li>• Concentrated visitor use impacts (pedestrians, ORV use)</li> <li>• Nonnative species proliferation</li> <li>• Illegal and improper use of ORVs</li> <li>• Maintaining routes for off-road vehicle use</li> <li>• Ramps cause breaches in the dune system and increase gaps between dunes causing unnatural erosion dynamics</li> <li>• Offshore wind energy development and sand mining operations would impact dynamics of natural processes</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Scientific research as it relates to barrier islands</li> <li>• Public education and interpretation</li> <li>• Maintain intact barrier island system</li> <li>• Partnerships with U.S. Army Corp of Engineers, U.S. Coast Guard, State of North Carolina, and Carteret County</li> <li>• Proactively discuss boundary interpretations with State of North Carolina agencies</li> </ul>

<p><b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b></p>	<ul style="list-style-type: none"> <li>• Surveys and system studies</li> <li>• NPS Coastal Engineering Inventory</li> <li>• Carteret County data</li> <li>• Aerial photographs from past decades</li> </ul>
<p><b>Data Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Elevation change modeling</li> <li>• Shoreline/island movement over time</li> <li>• Habitat changes over time</li> <li>• Geologic resources inventory reports</li> <li>• Analysis of overwash processes (relative to developed areas, including ramps, roads, etc.)</li> <li>• Aerial photographs taken at least every decade or following major storm events</li> </ul>
<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Continue to develop Dredged Material Management Plan for Beaufort Inlet as a cooperating agency</li> <li>• Continue to develop off-road vehicle management plan</li> <li>• Evaluate all existing structures within the seashore on the basis of how each is impacting the intact barrier island system</li> <li>• Resource stewardship strategy</li> <li>• Transportation plan (including strategies for documenting and managing ramps and roads network)</li> <li>• Climate change scenario planning</li> </ul>
<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Continue to partner with U.S. Army Corps of Engineers and Carteret County</li> <li>• Continue to monitor dredging proposals in the Morehead City and Ocracoke Inlet areas</li> <li>• Stay engaged in Bureau of Ocean Energy Management (BOEM) EIS and monitor future permitting activities</li> <li>• Request funding and manage a robust GIS program, including monitoring island changes from ongoing processes, as well as major storm events</li> <li>• Ensure proper resource protection coverage throughout the year</li> <li>• Continue monitoring geologic processes</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• National Environmental Policy Act of 1969</li> <li>• NPS Director's Order 77: <i>Natural Resource Protection</i></li> <li>• Executive Order 11989, "Use of Off-Road Vehicles on the Public Lands" (amends Executive Order 11644)</li> <li>• Executive Order 11990, "Wetland Protection"</li> <li>• Executive Order 11988, "Floodplain Protection"</li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> </ul>



Salt marsh on Core Sound

<b>Fundamental Resource or Value: Undeveloped character</b>	
<b>Importance</b>	One of the seashore's most distinguishing values is its primarily undeveloped qualities in contrast to neighboring barrier islands. There are no roads or bridges to the seashore's islands, which contributes to unique visitor opportunities. Natural processes are central to the visitor experience here. The ocean's power resonates through the sounds of pounding surf along the Core Banks, for example, while few traces of human use are noticeable within Core Sound marshes. Visitors can witness the vast ocean viewshed by day and enjoy some of the darkest night sky vantages along the East Coast by night.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Very little development between access nodes</li> <li>• Limited facilities on islands</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Visitor use impacts are increasing at arrival nodes</li> <li>• Increased ORV use over time may also impact the undeveloped character of the islands' more remote areas</li> <li>• NPS placement of signs away from developed nodes may not take into account goal of maintaining the undeveloped character outside developed zones at a minimum level</li> <li>• Mainland shoreline development increases visitor use and may negatively impact viewshed</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Potential offshore development (e.g, wind energy) could have negative impact on viewshed and night sky</li> <li>• Lights and noise from NPS operations and facilities can negatively impact quality of night sky viewing and natural sounds</li> <li>• Use of generators on the islands negatively impact natural sounds</li> <li>• Overflight tours negatively impact natural sounds and viewshed quality</li> <li>• Potential military overflights impact natural sounds and viewshed quality</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Visitor education/enhanced interpretation throughout seashore (i.e., improved signs and interpretive displays at visitor centers and developed areas to let visitors know what is being done to preserve the seashore's undeveloped character)</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Alternative transportation plans (existing plans do not include delivery sites)</li> <li>• Use statistics (some soundscape data; seashore will receive oceanside viewshed data for potential offshore energy development project)</li> <li>• GPS data for structures</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Visitor use experience data (i.e., study how visitors perceive seashore management with regard to levels of visitor use and NPS-related seashore development)</li> <li>• Night skies data</li> <li>• Natural sounds data</li> <li>• Viewshed data</li> <li>• User capacity</li> <li>• Better energy management data collection and controls for operations at the seashore</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Comprehensive sign plan</li> <li>• Development concept plan or master plan that focuses on easing pressure at access nodes; include alternative transportation components</li> </ul>

<p><b>Management Actions to Protect and Maintain FRV (or OIRV)</b></p>	<ul style="list-style-type: none"> <li>• Educate visitors—strategic placement of visitor information to protect undeveloped character (i.e., strategic sign management)</li> <li>• Reduce operational impacts (night skies, viewshed, natural sounds) (i.e., manage use of generators; include reduction of operational impacts on Harkers Island as well)</li> <li>• Carbon footprint management</li> <li>• Consider life cycle costs of developing operational infrastructure</li> <li>• Visitor use management—consider ways to disperse visitors</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• National Environmental Policy Act of 1969</li> <li>• Executive Order 11514, "Protection and Enhancement of Environmental Quality"</li> <li>• NPS Director's Order 12: <i>Conservation Planning, Environmental Impact Analysis, and Decision-making</i> and DO-12 Handbook</li> <li>• Cape Lookout National Seashore enabling legislation (1966)</li> </ul>



*Life-saving Station in Cape Village*



Fundamental Resource or Value: Lighthouse and other federal maritime structures within the Cape Lookout Village National Historic District	
<b>Importance</b>	Structures and sites in the national historic district represent over two centuries of federal efforts to protect maritime commerce at the Cape, including the 1812 lighthouse (site), 1859 lighthouse and light station, 1886 U.S. Life-Saving Station, and the 1917 U.S. Coast Guard Station. The most iconic structure—the 1859 lighthouse—was the first of the four tall tower lighthouses built on the North Carolina coast. The lighthouse, with its unique diagonal checkered daymark, was individually listed on the National Register of Historic Places in 1972. The “station” consists of the lighthouse, the keepers’ quarters, and associated structures.
<b>Condition</b>	<p>Cape Lookout Lighthouse Complex</p> <ul style="list-style-type: none"> <li>• Barden Inlet migration and sound-side shore erosion has destroyed the Keepers’ Quarters Coal Shed (Hurricane Isabel, 2003)</li> <li>• The lighthouse historic landscape has not been stabilized, resulting in resource loss, and has been impacted by visitor use, storm events, and NPS management activity</li> <li>• Constructed boardwalks are used to reduce pedestrian impact on dunes and vegetation; boardwalks may not be properly designed to protect the primary ocean and sound-side dunes</li> <li>• All structures have been stabilized, with the exception of the Life-Saving Station and Jetty Workers House #1</li> <li>• The insides of the structures have not been rehabilitated</li> <li>• Viewshed of the ocean is not impacted by human development</li> </ul>
<b>Trends</b>	<p>Cape Lookout Lighthouse Complex</p> <ul style="list-style-type: none"> <li>• Barden Inlet migration and sound-side shore erosion moving toward the lighthouse</li> <li>• Lighthouse grounds and landscape are deteriorating; lack of landscape stabilization</li> <li>• Increased use and visitation to this area</li> <li>• Increased interest in access to the lighthouse</li> </ul> <p>U.S. Life-Saving Station Complex, U.S. Coast Guard Station Complex</p> <ul style="list-style-type: none"> <li>• Ongoing weathering and storm event impacts</li> <li>• U.S. Life-Saving Station is rapidly degrading</li> <li>• See appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>



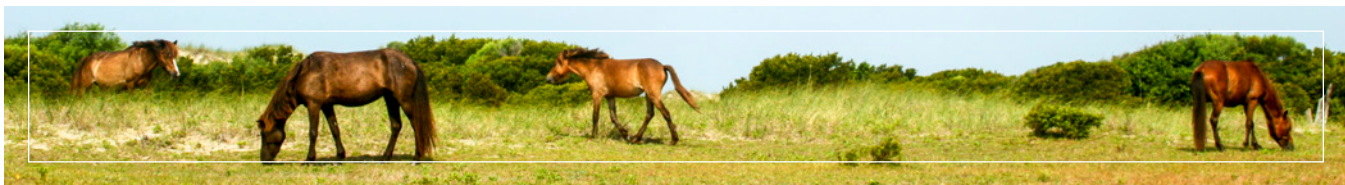
*Cape Lookout Lighthouse circa 1913*

<p><b>Threats</b></p>	<ul style="list-style-type: none"> <li>• Climate change and associated influences (sea level rise, increase in annual mean temperature)</li> <li>• Forest fuel loads increase wildfire threats near historic structures</li> <li>• U.S. Coast Guard proposal to delist the lighthouse as an aid to navigation (ATN) and to discontinue support for maintaining the lighting apparatus</li> <li>• Barden Inlet migration and sound-side shore erosion has destroyed the Keepers' Quarters Coal Shed (Hurricane Isabel, 2003), and threatens the 1873 Keepers' Quarters, Summer Kitchen, the historic landscape, and the 1859 lighthouse</li> <li>• Impending loss of U.S. Coast Guard support to the lighthouse, the underwater power cable is nearing the end of its useful life</li> <li>• Lack of a NPS cyclic maintenance program and insufficient funding for historic preservation at the site</li> <li>• Increased visitation and inadequately managed pedestrian traffic</li> <li>• Impact to ocean viewshed from development of offshore energy</li> <li>• Climate change and associated influences (sea level rise, increase in annual mean temperature)</li> <li>• Forest fuel loads increase wildfire threats near historic structures</li> <li>• Storm events</li> <li>• Weathering</li> <li>• Public break-ins and vandalism</li> </ul>
<p><b>Opportunities</b></p>	<ul style="list-style-type: none"> <li>• Lighthouse is an iconic structure that serves as a driver for tourism in the region</li> <li>• Opportunity to partner with U.S. Coast Guard for solarization of the light apparatus and for return of the Cape Lookout Fresnel lens</li> <li>• Opportunity to partner with Carteret County Tourism Development Authority for interpretation of the light station and for preservation of the site</li> <li>• Utilize the lighthouse in creative, resource-compatible ways to raise nonfederal funds for maintenance and protection</li> </ul>
<p><b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b></p>	<ul style="list-style-type: none"> <li>• Structural engineering reports for lighthouse</li> <li>• Historic structure report (HSR) for lighthouse</li> <li>• 11 HSRs for Cape Village structures (i.e., Life-Saving Station)</li> <li>• Cultural landscape report (CLR)</li> <li>• Engineering drawings</li> <li>• GIS layers (location)</li> <li>• Cape Lookout Village Historic Structure Reuse Implementation Plan/Environmental Assessment</li> <li>• Development concept plan for Cape Lookout Light Station</li> <li>• Wildland fire management plan (2010)</li> </ul>
<p><b>Data Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Review structural engineering report to identify critical needs</li> <li>• Need HSR for Coast Guard station</li> <li>• Shoreline change data</li> <li>• Document and catalog historic fabric</li> </ul>
<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Historic American Buildings Survey/Historic American Engineering Report</li> <li>• Lighthouse restoration plan (identify strategies for identifying and implementing restoration work on lighthouse buildings, grounds, and structural repairs for the top of the lighthouse and a strategy on how to respond to shoreline change)</li> <li>• Update wildland fire management plan (as needed)</li> <li>• Climate change scenario planning</li> <li>• Structural fire management plan (SFMP)</li> </ul>

<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Per engineering reports, the lighthouse needs various rehabilitation treatments</li> <li>• Forest fuel reduction program to protect and maintain structures</li> <li>• Seek funding to implement the Cape Lookout Village Historic Structures Reuse Implementation Plan</li> <li>• Continue to train staff on historic preservation techniques</li> <li>• Seek funding for a cultural resource specialist</li> <li>• Continue to support volunteer presence at the light station and at the Cape Village Historic District</li> <li>• Improve building security to mitigate break-ins and human-caused damage</li> <li>• Remove noncontributing structures (i.e., structures that do not contribute to historic setting)</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• National Historic Preservation Act of 1966</li> <li>• Executive Order 13287, "Preserve America 2003"</li> <li>• NPS Director's Order 28: <i>Cultural Resource Management</i></li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> <li>• See appendix F for detailed list of agreements</li> </ul>



<b>Fundamental Resource or Value: Shackleford Banks horse herd</b>	
<b>Importance</b>	Shackleford Banks, the southwesternmost barrier island within seashore boundaries, is one of the few places in the eastern United States that visitors can see a herd of free-roaming wild horses. The origin of the horses is the subject of several tales and a remnant of the practice of using the islands as open range. The Shackleford horses are protected by federal legislation as a cultural resource.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Maintain horse population as mandated by federal legislation</li> <li>• Population is disease-free</li> <li>• Population range is consistent with legislative limits</li> <li>• Each horse is individually identified</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Stable population with ongoing management</li> <li>• Genetically viable population is maintained through selective removals</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Storm events</li> <li>• Visitor interaction</li> <li>• Disease</li> <li>• Climate change and the associated influences (sea level rise, increase in annual mean temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Overall visitor education and interpretation opportunities</li> <li>• Utilizing best management practices to foster a genetic pool for Shackleford horses</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Genetic information and behavioral studies about horses (i.e., matrilineage)</li> <li>• Horse management plan</li> <li>• Social structure</li> <li>• Annual census</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Ecological impacts (i.e., herd carrying capacity)</li> <li>• Impacts associated with management and visitor interaction with horses (i.e., to what degree are horses becoming "tame"?)</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Update horse management plan (cyclical)</li> <li>• Climate change scenario planning</li> </ul>
<b>Management Actions to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Per legislation, continue partnership with the Foundation for Shackleford Horses or similar organization</li> <li>• Retain a biologist experienced in horse management</li> </ul>
<b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>• Public Law 105-202 (Shackleford Banks Wild Horses Protection Act)</li> <li>• Public Law 109-117 (mandate to maintain "not less than 110 free-roaming horses," with a target population between 120 and 130 free-roaming horses)</li> <li>• Public Law 92-195 (Wild and Free-Roaming Horses and Burros Act of 1971)</li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> </ul>

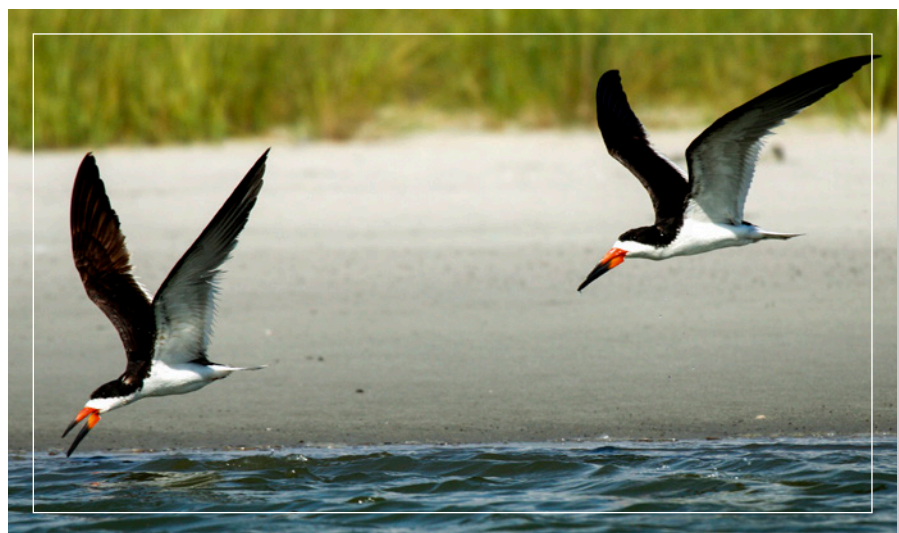


*Shackleford horses*

<b>Fundamental Resource or Value: Portsmouth Village National Historic District</b>	
<b>Importance</b>	Chartered in 1753 by the North Carolina Colonial Assembly, Portsmouth Village played a critical role in the conduct of maritime commerce in North Carolina from the colonial period until the American Civil War. It remains an intact village, featuring 21 historic buildings and structures.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Total of 21 historic structures, highlighted by the U.S. Life-Saving Service complex, Methodist church, post office, schoolhouse, and several former residences</li> <li>• Structures condition varies—recent hurricanes caused significant damage</li> <li>• Structures are 50% stabilized</li> <li>• Six interiors are open to the public, including the Salter Dixon house (visitor center), schoolhouse, church, post office, U.S. Life-Saving Service complex, and the Henry Pigott House</li> <li>• Exterior orientation waysides are located at the Haulover dock and on the road to the village; five waysides are located near structures usually open in the village; and most structures are identified by low profile trailside markers used to identify the buildings</li> <li>• Village contains a large portion of the seashore's archeological sites</li> <li>• The village's interpretive story has been told through exhibits, waysides and an audio tour</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Physical elements and recent storm events are increasing challenges to maintain structures</li> <li>• The seashore maintains the structures that are in good and fair condition and stabilizes the ones that are in poor condition</li> <li>• Losing grave site identification on markers due to weathering of historic fabric on gravestones</li> <li>• Additional structures will come under direct NPS management as they are released from historic leases or life estates</li> <li>• Lack of resource protection presence most of the year</li> <li>• See Appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Lack of adequate sanitation (inadequate septic systems and low likelihood of being able to install suitable systems due to shallow water table)</li> <li>• Lack of a potable water well and distribution system</li> <li>• Climate change and the associated influences (sea level rise, increase in annual mean temperature)</li> <li>• Storm events and hurricanes</li> <li>• Termites</li> <li>• Lack of funds to maintain structures</li> <li>• Lack of properly trained staff in historic preservation, restoration, and stabilization techniques for structural maintenance (both NPS staff and volunteers)</li> <li>• Lack of oversight to leaseholders</li> <li>• Head stone damage due to storm events and vandalism</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Further partnering for rehabilitation</li> <li>• Greater role for "Friends" group</li> <li>• Enhance interpretation and outreach</li> </ul>

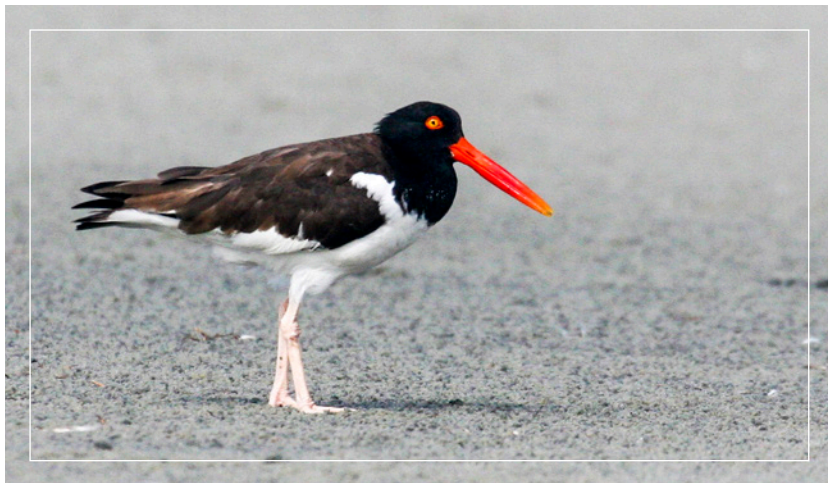
<p><b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b></p>	<ul style="list-style-type: none"> <li>• National register nominations</li> <li>• NPS List of Classified Structures (LCS)</li> <li>• Cultural landscape report</li> <li>• Five historic structure reports (HSRs)</li> <li>• Historic resource study for village and seashore as a whole</li> <li>• GPS data for location and first floor elevation of each structure</li> <li>• Condition assessment reports</li> <li>• Thompson drawings</li> <li>• Archeological (ASMIS) data</li> <li>• Historic furnishings plan for Washington Roberts House</li> <li>• Draft Wildland Fire Management Plan (2010)</li> <li>• See appendix D for detailed list</li> </ul>
<p><b>Data Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• 17 HSRs for Portsmouth Village</li> <li>• Identify and measure water inundation frequency and height</li> <li>• Update condition assessment</li> <li>• Preserve, document, and catalog historic fabric</li> </ul>
<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Comprehensive management strategy (prioritize management objectives, discuss public access, funding, etc.)</li> <li>• Update wildland fire management plan (as needed)</li> <li>• Climate change scenario planning</li> <li>• Structural fire management plan</li> </ul>
<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Maintain relationship with the “Friends” group</li> <li>• Continue to seek funds to support and manage the village</li> <li>• Continue to train staff on historic preservation techniques</li> <li>• Seek funding for a cultural resource specialist</li> <li>• Support interpretation of the village by volunteers and staff and provide for outreach</li> <li>• Provide enhanced resource protection presence</li> <li>• Forest fuel reduction program to protect and maintain structures</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• National Historic Preservation Act of 1966</li> <li>• Executive Order 13287, “Preserve America 2003”</li> <li>• NPS Director’s Order 28: <i>Cultural Resource Management</i></li> <li>• Executive Order 13423, “Federal Leadership in Environmental, Energy, and Economic Performance”</li> <li>• See appendix F for detailed list of agreements</li> </ul>

Fundamental Resource or Value: Birds	
<b>Importance</b>	The seashore's location along the Atlantic Flyway provides nesting, resting, and feeding habitat for a diverse assemblage of birds. In 1999, the American Bird Conservancy designated Cape Lookout National Seashore as a Globally Important Bird Area in recognition of the value the seashore provides to bird migration, breeding, and wintering. The seashore is home to the federally listed piping plover. In addition, the seashore provides nesting habitat for several state-listed species, including the common tern, least tern, gull-billed tern, and black skimmer. Solitary nesters, such as the American oystercatcher and Wilson's plover also use Cape Lookout National Seashore as a breeding ground, as well as the red knot, which uses the seashore as wintering habitat during spring and fall migrations.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Healthy populations overall</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Stable populations</li> <li>• Piping plover: long-term trend is stable or increasing; nesting trending up</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Predators</li> <li>• Storm events</li> <li>• Illegal and improper use of ORVs</li> <li>• Pedestrians and certain recreational activities</li> <li>• Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> <li>• Light and noise pollution</li> <li>• Potential offshore wind energy development</li> <li>• Nonnative species</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Scientific research partnerships</li> <li>• Public interpretation and education</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Interim Protected Species Management Plan (2007)</li> <li>• Nesting and productivity data, including annual reports for each species</li> <li>• Federal Species Recovery Plans</li> <li>• State Species Recovery Plans</li> </ul>



*Black skimmers*

<p><b>Data Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Document habitat dynamics (GIS)</li> <li>• Further document predator interaction with species (loss of nests to predators)</li> <li>• Impacts of off-road vehicle use</li> </ul>
<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Complete the off-road vehicle plan</li> <li>• Predator management plan</li> <li>• Climate change scenario planning</li> </ul>
<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Continue to monitor and manage nesting sites</li> <li>• Improve GIS capabilities related to bird monitoring</li> <li>• Seek continual funding for bird management (increase staff)</li> <li>• Improve trash management</li> <li>• Ensure resource protection presence</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• Endangered Species Act of 1973</li> <li>• Migratory Bird Treaty Act of 1918</li> <li>• Executive Order 13186, "Federal Agency Migratory Bird Protection"</li> <li>• NPS Director's Order 77: <i>Natural Resource Protection</i></li> <li>• Memorandum of Understanding between NPS and U. S. Fish and Wildlife Service (USFWS) to Promote Conservation of Migratory Birds (April 2010)</li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> <li>• See appendix F for detailed list of agreements</li> </ul>



*American oystercatcher*



*Loggerhead sea turtle*



<b>Fundamental Resource or Value: Sea turtles</b>	
<b>Importance</b>	Cape Lookout National Seashore is used as nesting habitat by four federally listed sea turtles: the loggerhead, green, leatherback, and Kemp's ridley. One other federally listed sea turtle species, the hawksbill, occupies the surrounding waters.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Sea turtle species are federally protected</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Nesting numbers are variable</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Predators</li> <li>• Storm events</li> <li>• Illegal and improper use of ORVs</li> <li>• Pedestrians and certain recreational activities</li> <li>• Light pollution (habitat disturbance; can affect sea turtle navigation at night)</li> <li>• Noise pollution causes habitat disturbance</li> <li>• Marine debris, including petrochemical spills</li> <li>• Litter from visitor use causes habitat disturbance</li> <li>• Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Scientific research partnerships</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Interim Protected Species Management Plan (2007)</li> <li>• Seashore has conducted annual monitoring reports since 1990; seashore has retained other monitoring information dating to the 1970s</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Impacts of off-road vehicle use</li> <li>• Further document predator interaction with species</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Predator management plan</li> <li>• Climate change scenario planning</li> <li>• Complete off-road vehicle management plan</li> </ul>
<b>Management Actions to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Complete off-road vehicle management plan and implement appropriate recommendations regarding sea turtle management</li> </ul>
<b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• National Environmental Policy Act of 1969</li> <li>• Endangered Species Act of 1973</li> <li>• NPS Director's Order 77: <i>Natural Resource Protection</i></li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> </ul>

<b>Fundamental Resource or Value: Scientific study</b>	
<b>Importance</b>	The seashore's wealth and diversity of natural and cultural resources make it a premier location to study coastal adaptation. This assemblage of seashore resources also serves as a natural laboratory to study barrier island dynamics, climate change, and ecological changes over time.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Limited funding for scientific study (other than monitoring coastal bird and turtle nesting)</li> <li>• Political pressure (e.g., inconsistencies across jurisdictions on research needs, possible political manipulation of research efforts)</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Funding research projects is an increasing challenge</li> <li>• Area marketing of tourism is increasing</li> <li>• Increased needs for partnership development</li> <li>• Increased need for applied research for real world applications</li> <li>• Increased accessibility for electronic research information</li> <li>• See appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Inlet dredging (Ocracoke Inlet)</li> <li>• Maintenance of Morehead City navigation channel</li> <li>• External threats                             <ul style="list-style-type: none"> <li>• pollution in the estuary</li> <li>• climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul> </li> <li>• Seashore development</li> <li>• Visitor use</li> <li>• Nonnative species proliferation</li> <li>• Offshore energy development</li> <li>• Lack of funding for research projects</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Public interpretation and education opportunities</li> <li>• Potential for marketing the seashore's barrier island resources for research purposes</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and mgmt.</b>	<ul style="list-style-type: none"> <li>• Research permits over time</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Shoreline GIS data (obtain and incorporate from academic scholarly round table)</li> <li>• Existing data gap analysis</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Resource stewardship strategy</li> <li>• Climate change scenario planning</li> </ul>
<b>Management Actions to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Appropriate use of research permits</li> <li>• Information sharing of research</li> <li>• Centrally organize and protect existing information for future seashore managers</li> <li>• Build stronger relationship with university research centers and laboratories</li> <li>• Seek research funding</li> </ul>
<b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>• NPS <i>Management Policies 2006</i> (2.1.2): Decision makers and planners will use the best available scientific and technical information and scholarly analysis to identify appropriate management actions for protection and use of park resources.</li> <li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li> <li>• National Parks Omnibus Management Act of 1998</li> </ul>

<b>Fundamental Resource or Value: Recreational opportunities and experiences in a remote setting</b>	
<b>Importance</b>	The seashore's recreational opportunities are regionally significant due to the variety and scale afforded by its unique geography and primarily undeveloped character. In addition, multigenerational activities, such as surf fishing, hunting, shelling, and beachcombing celebrate rich cultural traditions.
<b>Condition</b>	<ul style="list-style-type: none"> <li>Seashore continues to provide diverse, high quality visitor experiences in a remote setting</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>Visitation numbers have varied over the past 10 years, with an average of 650,000 visitors per year (NPS Public Use Statistics Office)</li> <li>Number of motorized vehicles is increasing</li> <li>Motorized vehicle types are getting larger</li> <li>North Carolina ranks 10th in the nation in number of overall boat registrations in 2009 and that number was increasing (National Marine Manufacturers Association 2010 Recreational Boating Statistical Abstract)</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>Litter from visitors and shipping lanes threatens natural qualities</li> <li>Cutting trees and wood collection in maritime forest threatens resource sustainability</li> <li>Human waste in areas without bathroom facilities (especially areas with high visitor concentrations, such as on the sound-side beach from Whale Creek to the west end of Shackleford Banks)</li> <li>Natural sounds intrusion from boat stereos and generators</li> <li>Shoaling along channels is difficult to manage and causes access problems</li> <li>Ferry operating costs and fares are too high for some visitors, causing a socioeconomic barrier</li> <li>Visitor crowding can diminish experience for some user groups</li> <li>External development threatens viewshed and night skies qualities</li> <li>Storm events threaten recreational infrastructure</li> <li>Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>The seashore is partnering with the Town of Beaufort for a ferry access location</li> <li>Partnerships with agencies to establish access points on the mainland (i.e., USFWS; North Carolina Wildlife Resources Commission, Carteret County)</li> <li>Reestablishing concessions contracts will help provide consistent levels of service and accessibility</li> <li>Expand interpretation and education programs</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>Long-range interpretive plan (June 2011)</li> <li>Alternative transportation plans</li> <li>Visitor use studies</li> <li>Commercial services plan</li> <li>See appendix D for detailed list of existing information</li> </ul>

<p><b>Data Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Review data collection system and methodology used to generate the numbers—the park needs improved visitation data</li> <li>• Number of boat registrations in Carteret County and other surrounding counties (i.e., how many visitors are from North Carolina’s populous Research Triangle cities?)</li> <li>• Visitor experience, perception, and various social science data</li> <li>• Motorized vehicle use numbers (i.e., location and frequency)</li> </ul>
<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Keep long-range interpretive plan up-to-date</li> <li>• Keep commercial services plan up-to-date</li> <li>• Cabin management plan (would include operations, storm response, and sustainability strategies)</li> <li>• Visitor use plan</li> <li>• Backcountry management plan</li> <li>• Climate change scenario planning</li> </ul>
<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Explore access options within the seashore (location, type, etc.)</li> <li>• Ensure mainland departure locations for ferries</li> <li>• Provide for visitor safety and resource protection</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• National Environmental Policy Act of 1969</li> <li>• Cape Lookout National Seashore enabling legislation (1966)</li> <li>• Executive Order 13423, “Federal Leadership in Environmental, Energy, and Economic Performance”</li> <li>• See appendix F for detailed list of agreements</li> </ul>



<b>Fundamental Resource or Value: Aquatic habitat</b>	
<b>Importance</b>	The seashore's wetlands, tidal marshes, seagrass beds, and freshwater ponds support nursery habitat and form the aquatic base of the barrier island ecosystem. Healthy functionality of each component aids the region's overall water quality. Combined with the natural benefits the seashore's aquatic habitat supports, this resource also contributes to unique, resource-compatible recreational opportunities.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Intact, primarily undeveloped and functioning</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Healthy and stable overall</li> <li>• Erosion and accretion is increasing</li> <li>• See appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Point source pollution, including trash from visitor uses, petrochemicals, and debris from shipping activities</li> <li>• Nonpoint pollution, including septic tank runoff from Down East communities and general wastewater treatment and enforcement issues</li> <li>• Visitor use impacts, including illegal and improper use of ORVs, boat propeller scarring of seagrass beds, boat wake, and construction and removal of duck blinds</li> <li>• Noncompliance with NPS prohibition of commercial fishing, including pound nets</li> <li>• Storm events</li> <li>• Invasive and nonnative species</li> <li>• Jurisdictional issues related to commercial fishing</li> <li>• Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• General partnership opportunities to protect resources (i.e., federal, state and local agencies, as well as nongovernmental organizations)</li> <li>• Partnerships for data needs (i.e., National Oceanic and Atmospheric Administration [NOAA])</li> <li>• Public education and public policy advocacy</li> <li>• Partner with Cape Hatteras National Seashore for data needs</li> </ul>
<b>Existing information (e.g., data, plans) about the FRV that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Submerged aquatic maps (NOAA)</li> <li>• North Carolina Marine Fisheries (shellfish data)</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• General GIS support, including habitat change analysis</li> <li>• Confirmation of boundary jurisdictions</li> <li>• Climate change/sea level rise</li> <li>• Monitor resource condition</li> <li>• Monitor water quality</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Resource stewardship strategy</li> <li>• Climate change scenario planning</li> </ul>

<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"><li>• Obtain GIS support (critical need)</li><li>• Review and improve duck blind management</li><li>• Obtain additional staff with aquatic expertise</li><li>• Commercial fishing management (jurisdictional issue)</li><li>• Provide for greater resource protection presence</li><li>• Coordination with other resource agencies to help manage certain seashore areas</li></ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"><li>• Coastal Zone Management Act of 1966</li><li>• Migratory Bird Treaty Act of 1918</li><li>• Endangered Species Act of 1973</li><li>• Marine Mammal Protection Act of 1972</li><li>• Executive Order 11990, "Protection of Wetlands"</li><li>• NPS Director's Order 77: <i>Natural Resource Protection</i></li><li>• Executive Order 13423, "Federal Leadership in Environmental, Energy, and Economic Performance"</li><li>• See appendix F for detailed list of agreements</li></ul>



<b>Fundamental Resource or Value: Terrestrial habitat</b>	
<b>Importance</b>	Similar to aquatic habitat, the seashore's open beaches, dunes, shrub thickets, and maritime forest stabilize the island's low profile terrestrial existence and provide the ecological foundation for its unique flora and fauna. The federally listed seabeach amaranth, a coastal plant, is found within the seashore.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Generally healthy and unaltered, but alterations from visitor use exist</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Dynamic changes, including erosion and accretion are increasing, especially areas adjacent to navigation channels, such as the west end of Shackleford Banks</li> <li>• See Appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Nonnative species proliferation</li> <li>• General visitor use impacts</li> <li>• Illegal and improper use of ORVs</li> <li>• Maintenance of road system causes localized impacts</li> <li>• Beach nourishment proposals could potentially cause a range of adverse impacts to flora and fauna</li> <li>• Human-caused fires have various impacts</li> <li>• Maintenance of navigation channels can impact dynamic terrestrial processes</li> <li>• Existing development may continue to have various impacts on terrestrial habitat</li> <li>• Jetty failure could expose sensitive terrestrial habitat to damage</li> <li>• Dredging could expose sensitive terrestrial habitat to damage and impact natural processes</li> <li>• Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Beach nourishment can reduce storm damage to terrestrial habitat by creating a "soft," nonpermanent, and more ecologically sensitive alternative to "hard" structures such as seawalls (Note: Beach nourishment is both an opportunity and a threat)</li> <li>• Strengthen partnership with NPS Exotic Plant Management Team (EPMT) and collaborate with other resource agencies engaged in exotic species management</li> </ul>
<b>Existing information (e.g., data, plans) about the FRV that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Vegetation map is being updated from 1970s NPS inventory and monitoring (I&amp;M) version</li> <li>• Shoreline position and aerial photography</li> <li>• Mapping for road network</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>• Inventory and monitoring of terrestrial species and composition of terrestrial habitat</li> <li>• Assessment of habitat functionality and use</li> <li>• Analysis of habitat change over time due to effects from geologic/coastal changes and human-caused changes</li> <li>• Inventory and study of nonnative, invasive plants and animals</li> <li>• Confirmation of boundary jurisdictions</li> <li>• Climate change/sea level rise</li> </ul>

<p><b>Planning Needs to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Complete off-road vehicle management plan</li> <li>• Small-scale development concept plans to guide nodal development, management, and accessibility (i.e., Long Point and Great Island camps)</li> <li>• Nonnative species and predator management plan (Note: combine these two management issues in a single plan for efficiency)</li> <li>• Climate change scenario planning</li> </ul>
<p><b>Management Actions to Protect and Maintain FRV</b></p>	<ul style="list-style-type: none"> <li>• Ramps and motorized uses provide access to protect habitat</li> <li>• Continue to complete inventory and monitoring duties</li> <li>• Provide enhanced GIS support, including additional staffing needs</li> </ul>
<p><b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b></p>	<ul style="list-style-type: none"> <li>• Coastal Zone Management Act of 1966</li> <li>• National Environmental Policy Act of 1969</li> <li>• Endangered Species Act of 1973</li> <li>• Migratory Bird Treaty Act of 1918</li> <li>• NPS Director's Order 77: <i>Natural Resource Protection</i></li> <li>• See appendix F for detailed list of agreements</li> </ul>





Fundamental Resource or Value: Human connection to the banks	
<b>Importance</b>	The human connection to the seashore's geographic setting provides a link to understanding human's ability to adapt to a changing coastal environment isolated from the mainland. The human connection to place at the seashore also includes a diversity of multigenerational activities that celebrate rich cultural traditions.
<b>Condition</b>	<ul style="list-style-type: none"> <li>Seashore retains a broad continuum regarding perspective to place</li> <li>Connection to the banks is ongoing</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>Losing commercial fishing and boat building industries</li> <li>Losing youth due to lack of regional job opportunities</li> <li>Connection to place being lost as older generations pass on</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>Losing history as structures degrade or are lost (i.e., camps at Shackleford Banks)</li> <li>Distortion of stories over time</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>Continue working with Core Sound Waterfowl Museum and Heritage Center to preserve the "Down East experience"</li> <li>Preserve stories and oral histories</li> <li>Public interpretation and education (particularly youth)</li> <li>Partner with universities, nongovernmental organizations, regional museums, etc.</li> <li>Develop a curriculum-based program to bring children to the seashore</li> <li>Advertise merits of scenic byway connections as a means of preserving region's unique history (i.e., Outer Banks Scenic Byway)</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>Long-Range Interpretive Plan (June 2011)</li> <li>Some oral histories</li> <li>Various books written about the area's heritage</li> <li>Scope of Collection Statement (2011)</li> </ul>
<b>Data Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>Complete translation of oral histories</li> <li>Ethnohistorical study</li> <li>Archival and historical research</li> <li>Additional research on Diamond City</li> <li>Comprehensive archeological surveys</li> <li>Additional research on World War II connection and history (i.e., provide history of spotlights, gun turrets, concrete basin, submarine nets, etc.)</li> </ul>
<b>Planning Needs to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>Archive collection plan (include scope)</li> <li>Update scope of collection statement (as needed)</li> </ul>
<b>Management Actions to Protect and Maintain FRV</b>	<ul style="list-style-type: none"> <li>Continue working with Core Sound Waterfowl Museum and Heritage Center to preserve the "Down East experience"</li> <li>Work with local school system to provide interpretive and educational opportunities</li> <li>Enhance interpretative programs to provide more comprehensive history of Diamond City and seashore's unique World War II history</li> <li>Obtain additional cultural resource staff</li> <li>Continue working with local organizations to preserve historical connections</li> <li>Provide for resource protection presence</li> </ul>
<b>Laws and Policies that Apply to the FRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>National Historic Preservation Act of 1966</li> <li>Executive Order 13287, "Preserve America 2003"</li> <li>NPS Director's Order 28: <i>Cultural Resource Management</i></li> <li>See appendix F for detailed list of agreements</li> </ul>



*Shipwreck on South Core Banks*

## Analysis of Other Important Resources and Values

The analysis of other important resources and values identifies its current status, potential threats and opportunities, needed data, planning and management decisions, and relevant laws and NPS policies related to management of the resources.

Other Important Resource or Value: Archeological sites (prehistoric sites, shipwrecks, cemeteries)	
<b>Importance</b>	The seashore retains an archeological legacy associated with survival at edge of the sea. Sites include prehistoric occupation sites, cemeteries at Portsmouth Village Historic District, and sunken ships and cargoes from colonial exploration to losses associated with German submarine attacks during the first months of World War II.
<b>Condition</b>	<ul style="list-style-type: none"> <li>All prehistoric sites known to exist at the seashore are located on Shackleford Banks</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>Most documented sites are deteriorating</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>Coastal erosion</li> <li>Limited funding and staffing to conduct archeological site work</li> <li>Storm events</li> <li>Visitor use damage—both casual and intentional (i.e., pot hunters)</li> <li>Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>Research partnership opportunities</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>Historic structures reports, historic resource studies, and other archeological reports</li> <li>State of North Carolina maritime archeological records (i.e., recorded shipwreck sites)</li> <li>See appendix D for detailed list</li> </ul>
<b>Data Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>Comprehensive archeological surveys</li> <li>General archival and historical research</li> <li>Sea level rise data</li> </ul>
<b>Planning Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>Cemetery management plan</li> <li>Archive collections plan</li> <li>Archeological overview and assessment</li> <li>Climate change scenario planning</li> </ul>
<b>Management Actions to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>Develop a historic preservation training program for resource protection/resource management staff</li> <li>Develop a monitoring program, which would include training resource protection/resource management staff of archeological locations</li> <li>Provide scheduled monitoring by resource protection/resource management staff</li> </ul>
<b>Laws and Policies that Apply to the OIRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>National Historic Preservation Act of 1966</li> <li>Executive Order 13287, "Preserve America 2003"</li> <li>NPS Director's Order 28: <i>Cultural Resource Management</i></li> </ul>

<b>Other Important Resource or Value: Diamond City and whaling industry</b>	
<b>Importance</b>	Shackleford Banks was the site of Diamond City, a whaling village on its east end that was one of the most distinctive of the pre-1900s “Down East” Outer Banks communities. Few remnants remain of the settlement; however, its story is exemplary of the region’s early commercial whaling industry and the attempt to sustain commerce at the edge of the sea.
<b>Condition</b>	<ul style="list-style-type: none"> <li>• Some historical and archeological resources are known to exist</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>• Most documented sites are deteriorating</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Coastal erosion</li> <li>• Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Research partnership opportunities</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>• Historic structure reports, historic resource studies, and other archeological reports</li> <li>• See appendix D for detailed list</li> </ul>
<b>Data Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>• Archival and historical research for Diamond City</li> <li>• Archive collections plan</li> </ul>
<b>Planning Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>• Archive collections plan</li> <li>• Climate change scenario planning</li> </ul>
<b>Management Actions to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>• None indicated</li> </ul>
<b>Laws and Policies that Apply to the OIRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>• National Historic Preservation Act of 1966</li> <li>• Executive Order 13287, “Preserve America 2003”</li> <li>• NPS Director’s Order 28: <i>Cultural Resource Management</i></li> <li>• Executive Order 13423, “Federal Leadership in Environmental, Energy, and Economic Performance”</li> </ul>

Other Important Resource or Value: Seabeach amaranth	
<b>Importance</b>	Seabeach amaranth is another sensitive species supported by the seashore's unique natural ecosystem. This annual plant is typically found in suitable habitat of overwash fans, sand flats, and low dunes. It is a federally protected species and acts as an efficient sand binder capable of creating mini sand dunes. The species often grows in the same areas selected for nesting by shorebirds such as plovers, terns, and skimmers.
<b>Condition</b>	<ul style="list-style-type: none"> <li>Seabeach amaranth is federally protected (primarily occurs on Shackleford Banks and the south end of South Core Banks)</li> </ul>
<b>Trends</b>	<ul style="list-style-type: none"> <li>Variable—stabilization of the plant species depends on dynamic conditions of the barrier island environment</li> <li>See appendix C for historical trends for average annual temperature, precipitation, and sea level rise</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>Marine debris, including petrochemical spills</li> <li>Visitor use causes habitat disturbance</li> <li>Climate change and the associated influences (sea level rise, increase in mean annual temperature)</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>Scientific research partnerships</li> </ul>
<b>Existing information (e.g., data, plans) that provides knowledge base for planning and management</b>	<ul style="list-style-type: none"> <li>Interim Protected Species Management Plan</li> <li>Seashore has conducted comprehensive annual surveys since 1993</li> </ul>
<b>Data Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>None indicated</li> </ul>
<b>Planning Needs to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>Climate change scenario planning</li> </ul>
<b>Management Actions to Protect and Maintain OIRV</b>	<ul style="list-style-type: none"> <li>Continue to implement Interim Protected Species Management Plan</li> </ul>
<b>Laws and Policies that Apply to the OIRV and the NPS Policy-level Guidance of the Resource or Value</b>	<ul style="list-style-type: none"> <li>Coastal Zone Management Act of 1966</li> <li>National Environmental Policy Act of 1969</li> <li>Endangered Species Act of 1973</li> <li>NPS Director's Order 77: <i>Natural Resource Protection</i></li> </ul>

## Identification of Key Parkwide Issues

All parks face a variety of issues that must be addressed now or through future planning. An issue is a point or matter that must be decided. A key parkwide or major issue may raise questions regarding park purpose and significance, or there may be other questions of importance that, in the judgment of NPS staff, need to be addressed in future planning.

Key parkwide issues exist at Cape Lookout National Seashore and each are addressed in the analysis of FRVs and identification of planning and data needs. These include implementing strategies to protect fundamental resources during storm events, stabilizing and rehabilitating priority historic structures, managing visitor use and encouraging responsible recreation, and developing partnerships to improve stewardship of the seashore's fundamental resources and values.

Because each of these issues is addressed elsewhere in this document, a thorough discussion is not needed here.

## Prioritization of Planning and Data Needs

This section prioritizes the need for future plans and studies or research for Cape Lookout National Seashore. It provides a comprehensive review and prioritization of plans and data needed to maintain and protect the seashore's fundamental (and other important) resources and values, as well as address key parkwide and other major issues. The planning and data needs were ranked below. Based on these criteria, plans and studies were grouped into categories of high, medium, and low priority projects. This information will be used by the seashore, regional offices, and the NPS Washington office to determine priorities and consider the future funding needs of the park unit.

## Planning Needs

Related to an FRV?	Planning Need/Notes	Priority
Yes	Strategy for management of the Cape Lookout Lighthouse and associated historic structures <i>Plan would address a suite of alternatives and include strategies for storm event response, climate change/sea level rise, and shifting shorelines due to erosion and accretion</i>	High #1
Yes	Portsmouth Village master plan <i>This comprehensive management strategy would prioritize management needs, considering cost, strategies for storm response and climate change/sea level rise; provide guidance for access and circulation; and discuss funding strategies</i>	High #2
Yes	Harkers Island master plan	High #3
Yes	Great Island and Long Point master plan	High #4
Yes	Resource stewardship strategy, including climate change scenario planning	High #5
Yes	Comprehensive sign plan	High #6
Yes	Nonnative species and predator management plan (combine for efficiency)	High #7
Yes	Sustainability plan/green plan (carbon footprint, operations, alternative energy, etc.)	High #8
Yes	Historic American Buildings Survey/Historic American Engineering Report for the Cape Lookout Lighthouse	Medium
Yes	Alternative transportation implementation plan serving Long Point, Great Island, and Portsmouth	Medium
Yes	Cape Village master plan	Medium
Yes	Comprehensive management plan (predefined scope akin to general management plan)	Medium
Yes	Backcountry management plan	Medium
Yes	Hunting management plan	Medium
Yes	Land protection plan	Medium
No	Operations plan for Les and Sally's Place	Medium
Yes	Structure assessment plan (noncontributing/nonhistoric) and future use	Medium
Yes	Visitor use management plan (include capacity)	Medium
Yes	Structural fire management plan	Medium
Yes	Air tour management plan	Low
No	Archive collection plan (include scope)	Low
No	Cemetery management plan	Low

## Data Needs

Related to an FRV?	Data Need/Notes	Priority
Yes	Review visitor data collection system and methodology used to generate the figures <i>Seashore needs more accurate visitation figures, including concentration and frequency for boats, boat registrations, off-road vehicle use, etc.</i>	High #1
Yes	Confirm boundary jurisdictions	High #2
Yes	Historic structure reports for all buildings in Portsmouth Village	High #3
Yes	Improved energy management data collection and controls (seashore operations)	High #4
Yes	Historic structure report for Coast Guard station at Cape Village	High #5
Yes	Visitor use capacity	High #6
Yes	Elevation change modeling	High #7
Yes	Document and catalog historic fabric <i>Information would include elements such as shutters, building pieces, grave stones, etc., and would include associated collections</i>	High
Yes	Further document predator interaction with species (loss of nests to predators)	High
Yes	Land ownership data	High
Yes	Update condition assessments in the facility management software system (Portsmouth Village)	High
Yes	Viewshed data	High
Yes	Visitor use experience data/baselines	High
Yes	Analysis of landscape change over time <i>Analysis would include GIS assessment of overwash processes (relative to developed areas such as ramps), habitat, vegetation, shoreline change data (island movement over time), and the seashore's existing structures impacts on the landscape</i>	Medium



Yes	Comprehensive archeological surveys	Medium
Yes	Ecological impacts (herd carrying capacity)	Medium
Yes	Existing data gap analysis (scientific study)	Medium
Yes	Identify and measure inundation frequency and height (storm events) for the Portsmouth Village and Cape Lookout Village Historic Districts and other developed nodes	Medium
Yes	Natural sounds data	Medium
Yes	Night skies data	Medium
Yes	Ethnohistorical study	Medium
Yes	Archeological overview and assessment	Medium
No	Additional research on Diamond City	Low
Yes	Archival and historical research	Low
Yes	Complete translation of oral histories	Low
Yes	Geologic resources inventory report (synthesis of existing data)	Low
Yes	Study to assess horse and human interactions	Low
Yes	New resource condition monitoring (i.e., aquatic and terrestrial habitat at seashore)	Low
Yes	Revisit structural engineering report for lighthouse	Low
Yes	Water quality monitoring	Low
No	Additional research on World War II connection and history (spotlights, gun turrets, concrete basin, submarine nets)	Low

## Part 3: Preparers and Meeting Attendees

This foundation document was developed as a collaborative effort among park staff and regional staff, with the assistance of NPS DSC specialists. A workshop to facilitate this process was held April 17–19, 2012, at Harkers Island, North Carolina.

### Preparers

Andrew Coburn, Project Manager, NPS Denver Service Center

Steve DeGrush, Natural Resource Specialist, NPS Denver Service Center

### Meeting Attendees

Mike Baker, Chief of Maintenance, Cape Lookout National Seashore

Jodi Eshleman, Coastal Engineer, NPS Geologic Resources Division

Wouter Ketel, Management Assistant, Cape Lookout National Seashore

Pat Kenney, Superintendent, Cape Lookout National Seashore

Joe Lamm, Park Ranger, Cape Lookout National Seashore

Barry Munyan, Chief Ranger, Cape Lookout National Seashore

Michael Rikard, Chief of Resource Management, Cape Lookout National Seashore

Amy Wirsching, Community Planner, NPS Southeast Regional Office

# APPENDIX A: ENABLING LEGISLATION, RELATED FEDERAL LEGISLATION, REGULATIONS, AND EXECUTIVE ORDERS

## Legislative Background

The U.S. Congress authorized Cape Lookout National Seashore on March 10, 1966 (PL 89-366). The legislation stated,

In order to preserve for public use and enjoyment an area in the State of North Carolina possessing outstanding natural and recreational values, there is hereby authorized to be established the Cape Lookout National Seashore.

The enabling legislation defined the seashore to include “the Outer Banks of Carteret County, North Carolina, between Ocracoke Inlet and Beaufort Inlet, plus adjoining marshlands and waters.” The seashore was to be administered “for the general purposes of public outdoor recreation, including conservation of natural features contributing to public enjoyment.”

## Legislative History

Public Law	Date	Description
HR 89-1278	February 11, 1966	House of Representatives report submitted prior to the seashore's enabling legislation (PL 89-366). Report provided amendments to HR 1784 and recommended establishment of Cape Lookout National Seashore.
Public Law 89-366	March 10, 1966	Enabling legislation for Cape Lookout National Seashore; this enabling legislation defined the national seashore to include the Outer Banks of Carteret County, North Carolina, between Ocracoke Inlet and Beaufort Inlet, plus adjoining marshlands and waters.
Public Law 93-477 (amended Public Law 89-366)	October 26, 1974	Amended Cape Lookout National Seashore boundary. Included Cape Lookout Lighthouse within the national seashore boundary. Called for the Secretary of the Interior to report wilderness suitability recommendations in accordance with the Wilderness Act.
Public Law 105-202, (amended Public Law 89-366)  Known as the "Shackleford Banks Wild Horses Protection Act"	July 16, 1998	Allowed a herd of 100 free-roaming horses at Cape Lookout National Seashore. Directed the National Park Service to enter into an agreement with the nonprofit Foundation for Shackleford Horses (or another qualified nonprofit entity) for the management of wild horses within the Cape Lookout National Seashore. Prohibited the National Park Service from removing any horses except for emergencies, or if the number of horses exceeded 110. Allowed the authorized entity to adopt any of those horses that the Secretary of the Interior removes from the seashore. Extended the authority of the National Peace Garden Foundation to establish a commemorative work in honor of the nation's commitment to peace, consistent with PL 105-202 (extended until June 30, 2002)
Public Law 105-229 (amended Public Law 89-366)	August 13, 1998	Purported to make amendments to subsection (b) that were identical to the ones made by PL 105-202 (July 16, 1998); therefore, in order to effectuate the probable intent of Congress, the amendments were not executed.
Public Law 106-355  Known as the "National Historic Lighthouse Preservation Act of 2000"	October 24, 2000	Amended Title III of the National Historic Preservation Act (16 USC 470w) by adding requirements for historic lighthouses. Requirements included broad inventory, monitoring, and information dissemination objectives. Detailed requirements discussed terms of conveyance, should they be applicable for historic lighthouses in the future.
Public Law 109-117 (amended Public Law 89-366)	December 1, 2005	Allowed for an adjustment in the number of free-roaming horses permitted at Cape Lookout National Seashore. Amendments specified "not less than 110 free-roaming horses," with a target population of between 120 and 130 free-roaming horses.  Allowed for removal of free-roaming horses that is carried out as part of a plan to maintain the viability of the herd.

## APPENDIX B: WILDERNESS CHARACTER

### Overview of Wilderness Qualities

From the pounding ocean surf on the south side of Cape Lookout National Seashore's southwesternmost barrier island to the comparatively calm salt marshes in the Back Sound, the 2,990-acre ribbon of sand between the two zones hosts wilderness qualities unique to the eastern United States. Located two miles from the mainland, the primary wilderness attribute of this salty strip of land called Shackleford Banks is a sense of remoteness not found on neighboring coastal islands outside of the seashore. Those islands, in contrast, are easily accessed, heavily used, and far more developed.

Shackleford Banks includes a variety of landscapes from undulating high dunes to maritime forest. Visitors disperse along the island on foot to fish, beachcomb, swim, picnic, hike, backpack, and camp. Natural processes tend to dominate the wilderness experience here. The ever-present power and dynamism of the ocean is emphasized, for example, by deposits from past storm overwash events.

The National Park Service submitted a wilderness recommendation to Congress in August 1985 for the Shackleford Banks area; however, no formal designation has been made to date. A 1974 wilderness study conducted for the seashore proposed designating approximately 16% (2,992 acres) as wilderness. In accordance with the Wilderness Act (PL 88-577) and directed by PL 93-477, the study examined the entire seashore boundary for wilderness suitability. The proposed wilderness includes the entire emergent land area on Shackleford Banks.

### Wilderness Character Integration

An interagency team has developed a national framework to monitor wilderness character, using four main qualities of wilderness. Each quality is discussed in further detail for the proposed wilderness area:

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

#### Wilderness Quality: Untrammeled

The untrammeled quality of Shackleford Banks within Cape Lookout National Seashore is indicated by sections of sparsely visited beaches and dense pockets of maritime forest on the island's interior that see very few humans. The more untrammeled areas of the island are located in its eastern half. Visitors to these areas may witness native wildlife,

such as the loggerhead sea turtle that comes ashore to nest. They may experience expansive ocean views, where sightings of vessels are less frequent. Here, the seashore thoroughly appears to have been affected primarily by the forces of nature, and the earth and its community of life are untrammelled by man. There is virtually no development on Shackleford Banks and vehicles and other mechanized uses are not allowed (with the exception of limited NPS administrative operation of all-terrain vehicles). No formal access is provided to the other parts of the island, which helps Shackleford Banks retain untrammelled qualities.

#### **Threats to untrammelled quality.**

The primary actions that degrade the untrammelled quality on Shackleford Banks include high concentrations of visitors that use the island's beaches for recreation activities. Visitation is highest during summer weekends. Visitors tend to recreate in the Back Sound areas on the west side of the island, which is a relatively small portion of Shackleford Banks. Litter, noise, and impacts to vegetation from beach activities remain challenges for seashore management in those areas. Inventory and monitoring actions by NPS staff include the limited operation of all-terrain vehicles stored on the island, which can hinder the untrammelled wilderness quality. Signs and posts have been installed near some bird and turtle monitoring areas, directing visitors to “stay out” of these sensitive sites. NPS staff is required to manage a wild horse herd on the island as well, which requires administrative use of such vehicles and can further impact the island's untrammelled quality.

#### **Wilderness Quality: Natural**

The community of life within the proposed Shackleford Banks wilderness is part of a complex barrier island ecosystem. Federally protected species, such as the loggerhead sea turtle, nest from late May to early August, and the seashore hosts an amazing diversity of birds along the Atlantic Flyway. American oystercatchers and seabeach amaranth are other sensitive species supported by the seashore's unique natural ecosystem. The island's combination of dunes, forest, and marshes is underscored by sparse human visitation to most parts of the island, which retains its overall natural character.

There are no roads or bridges to Shackleford Banks and the island remains a rare haven of diversity and complexity on the North Carolina coast. Natural processes are central to the visitor experience as the natural interplay of winds, waves, tides, and currents continually restructure the island. Indeed, the island's natural qualities also serve as a natural laboratory to study barrier island dynamics, climate change, and ecological changes over time. The extraordinary landscape and variety of ecological systems create a unique natural character in the proposed wilderness.

#### **Threats to natural quality.**

The biophysical environment and overall integrity of the proposed wilderness have suffered from some external and internal degradation. In addition to the visitor use impacts noted in the “untrammelled” quality above, there is a potential for accelerated erosion due to human activities, such as installation of the Cape Lookout Jetty and subsequent failure of the jetty, maintenance dredging of Barden and Beaufort Inlets, and maintenance of the Morehead City federal navigation channel. On the island, wild horse

impacts threaten natural quality. Human-caused fires, human and domestic pet waste, and minimal hunting management can also impact the natural wilderness quality, as well as military and commercial overflights and a proposed beach nourishment project.

### **Wilderness Quality: Undeveloped**

Except for two docks on Shackleford Banks (formally outside of the wilderness area), a horse pen, two small comfort stations, and an all-terrain vehicle shed, Shackleford Banks is undeveloped. The contrast of extremely limited development within the proposed wilderness compared to neighboring islands and much of the North Carolina mainland exemplifies the undeveloped quality of the area. Visitors are allured by the almost entirely unobstructed views and natural sounds on the ocean side of the island. In place of human-caused development that has occurred on neighboring islands, the proposed wilderness is still shaped primarily by natural processes. Distance from neighboring towns on this side of the island provides an excellent vantage point from which to view night skies, and the vast ocean expanse harbors little evidence of human presence.

#### **Threats to undeveloped quality.**

The small administrative maintenance area within the proposed wilderness contains modern developments. The proposed wilderness is more impacted by signs of human activity and development adjacent to the western (sound) side of the island. Lights, buildings, and vessel traffic within the Beaufort Inlet are also evident on the west side of the island. Potential dredging activities in this area may occur in the future.

### **Wilderness Quality: Solitude or Primitive and Unconfined Recreation**

Perhaps one of the most tangible qualities, the outstanding opportunity for solitude and recreation remains a fundamental characteristic of the proposed Shackleford Banks wilderness. Vast views of endless sky and distant ocean horizons elicit a liberating isolation from the urban world. Opportunities for hiking, backpacking, camping, sightseeing, stargazing, nature studying, and wildlife viewing provide visitors with outstanding options for recreation. The most concentrated visitor use exists primarily on the island's west side, whereas visitation to the island's interior remains more limited.

#### **Threats to solitude or primitive and unconfined recreation quality.**

Periods of intense visitor use on the island's west side may diminish the opportunity for some visitors to fully experience the island's solitude. Recreational boat traffic adjacent to the shoreline and associated day and overnight use of the sandy beaches on the sound side, from Whale Creek to the island's west end, may impact visitors seeking solitude in this area. This high use area is relatively small compared to the overall size of the island. There are approximately 10 miles of sound side sandy beaches along the entire 56 miles of Cape Lookout National Seashore. These areas are essential for public recreation. For comparison purposes, the sound side of Shackleford Banks includes 5 miles or approximately 50% of that total figure. Therefore, visitor concentrations and impacts to the proposed wilderness area fringe may impact visitors seeking solitude within these high use areas.

## APPENDIX C: CLIMATE CHANGE AND SEA LEVEL TRENDS FOR PLANNING AT CAPE LOOKOUT NATIONAL SEASHORE

### Historical Trends

During the 20th century, temperature has increased across North America (figure 1) and in the 50 km by 50 km area that includes Cape Lookout National Seashore (figure 2; table 1).

Precipitation has increased across the southeastern United States (figure 3), but decreased slightly in the area including the seashore (figure 4). The temperature and precipitation trends are not statistically significant for the seashore area. Sea level in the region has shown a significant increase over the past century (Kemp et al. 2011; figure 5); this can be especially noticeable at Beaufort, North Carolina, since the installation of the tidal gauge in 1953 (figure 6). Analyses of causal factors attribute 20th century global temperature, precipitation, and sea level changes to greenhouse gas emissions from vehicles, power plants, deforestation, and other human activities (IPCC 2007).

### Future Projections

Intergovernmental Panel on Climate Change (IPCC) has coordinated research groups in projecting possible future climate under defined greenhouse gas emissions scenarios (IPCC 2007). Current global emissions are at or above IPCC emissions scenario A2. For the three main IPCC emissions scenarios, temperature could substantially increase (table 1). Precipitation projections do not consistently show increases or decreases across emissions scenarios. In addition, projections downscaled to 4 km by 4 km indicate that, for the area of the seashore, some of the general circulation models (GCMs) project increases in precipitation for IPCC emissions scenario A2, while project decreases (figure 7; data from Conservation International, using method of Tabor and Williams [2010]). Sea level projections (Vermeer and Rahmstorf 2009) indicate increases in the rate of sea level rise (table 1).



<b>Table 1. Cape Lookout National Seashore Climate and Sea Level Trends</b>			
<b>Historical</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Unit of Measure</b>
Temperature 1901–2002 annual average	15.1	0.6	°C
Temperature 1901–2002 linear trend	0.3	0.02	°C/century
Precipitation 1901–2002 annual average	920	190	mm/year
Precipitation 1901–2002 linear trend	ca. 0	<0.1	%/century
Sea level, North Carolina 1900–2000	2.1	n/a	mm/year
Sea level, Beaufort 1953–2010	2.61	0.4	mm/year
<b>Projected</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Unit of Measure</b>
<b>IPCC B1 scenario (lower emissions)</b>			
Temperature 1990–2100	1.9	0.2	°C/century
Precipitation 1990–2100	+2	1	%/century
Sea level by 2100	104	n/a	cm above 1990
<b>IPCC A1B scenario (medium emissions)</b>			
Temperature 1990–2100	2.8	0.3	°C/century
Precipitation 1990–2100	+2	1	%/century
Sea level by 2100	124	n/a	cm above 1990
<b>IPCC A2 scenario (higher emissions)</b>			
Temperature 1990–2100	3.1	0.3	°C/century
Precipitation 1990–2100	+2	1	%/century
Sea level by 2100	124	n/a	cm above 1990

Note: Historical and projected climate (mean ± standard deviation (SD)) for the 50 km by 50 km square area that includes the seashore (Mitchell and Jones 2005, IPCC 2007, Gonzalez et al. 2010), North Carolina historical sea levels from Kemp et al. (2011), Beaufort mean sea levels calculated based on data from Morehead City tidal gauge data from PSMSL (station ID 719; <http://www.psmsl.org/data/obtaining/stations/396.php>) and NOAA (station ID 8656483; [http://tidesandcurrents.noaa.gov/sltrends/sltrends\\_update.shtml?stnid=8656483](http://tidesandcurrents.noaa.gov/sltrends/sltrends_update.shtml?stnid=8656483)); projections of global mean sea level from Vermeer and Rahmstorf (2009)

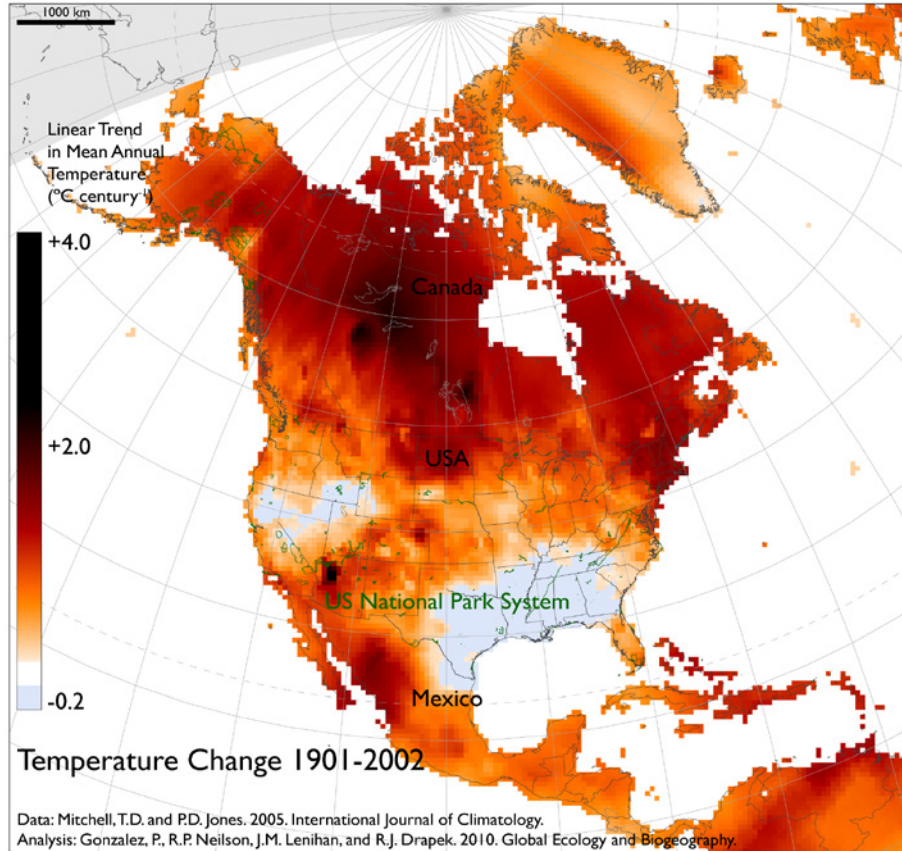


Figure 1. Temperature Change 1901–2002

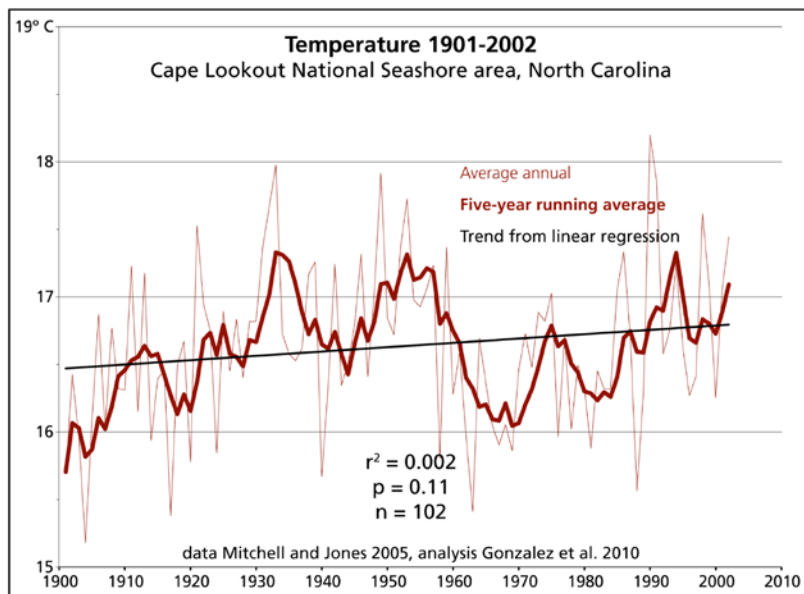


Figure 2. Temperature 1901–2002

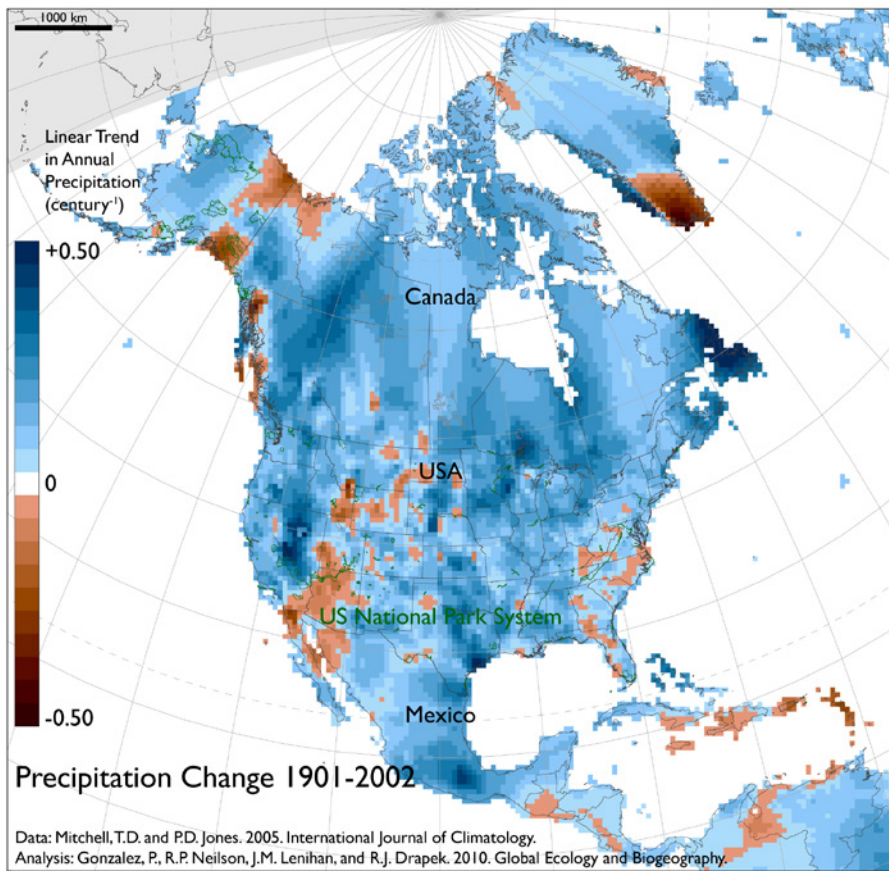


Figure 3. Precipitation Change 1901–2002

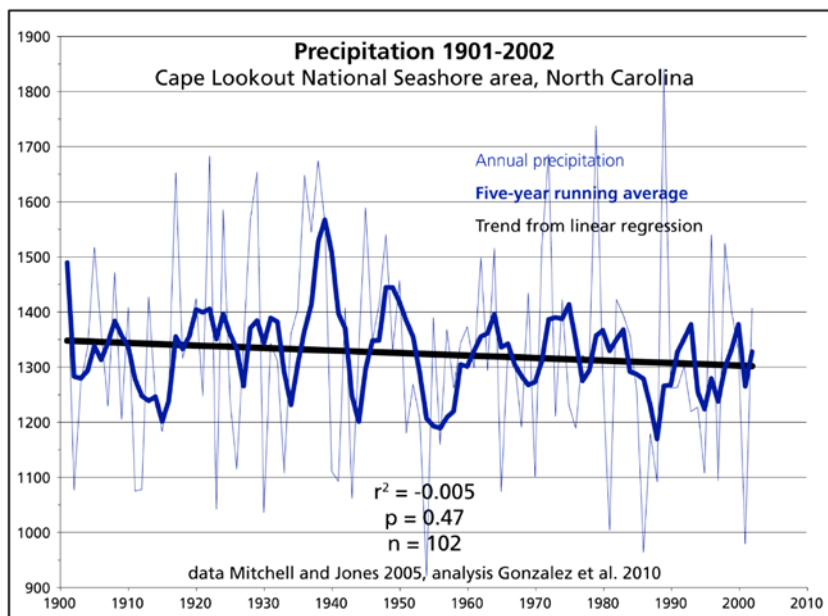


Figure 4. Precipitation 1901–2002

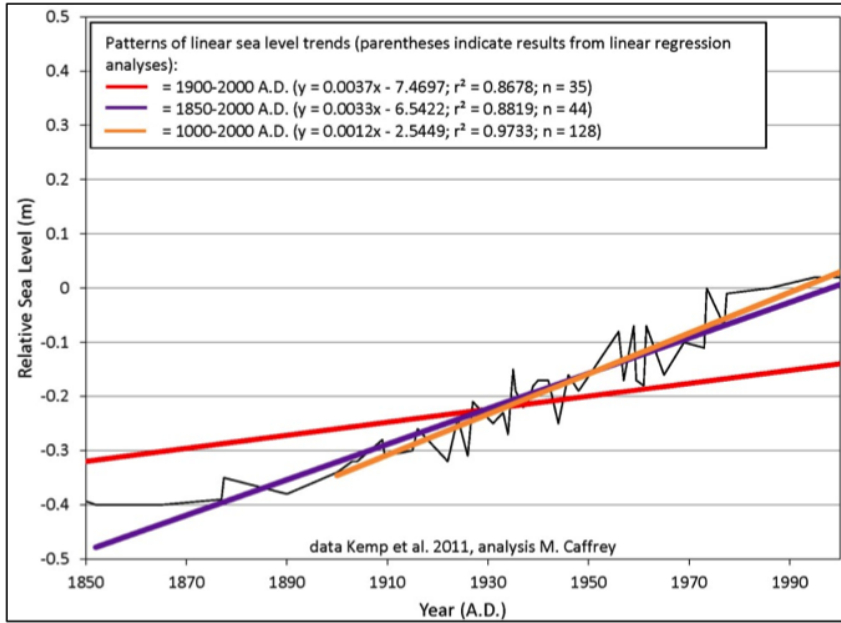


Figure 5. Sea Level Rise 1850–2002

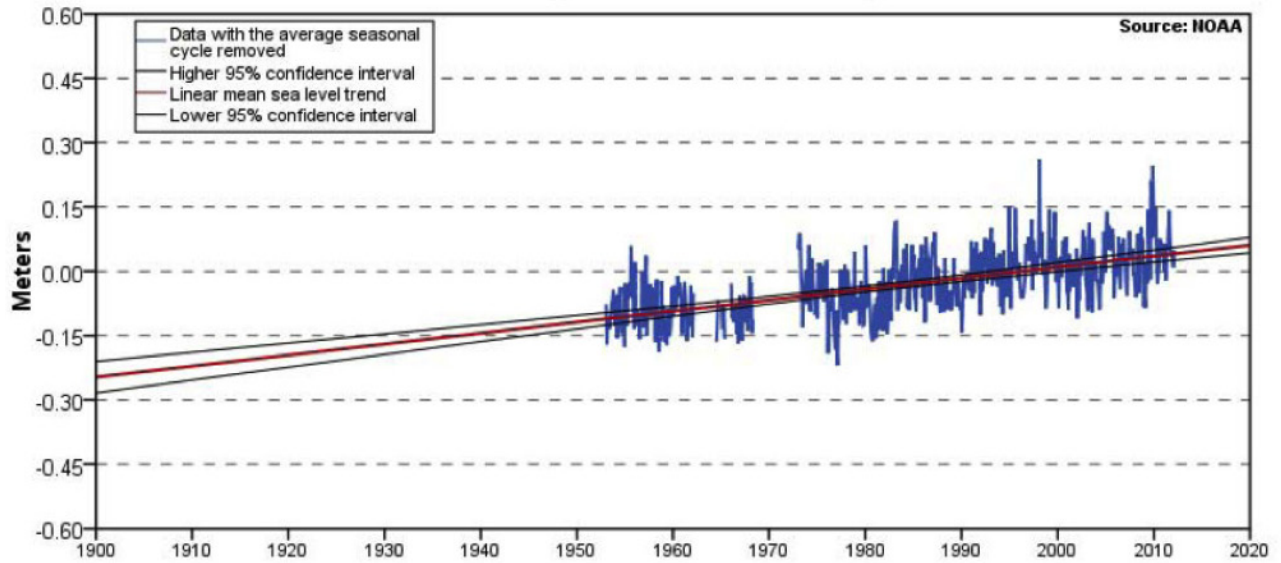


Figure 6. Tidal Gauge Data 1953–2012

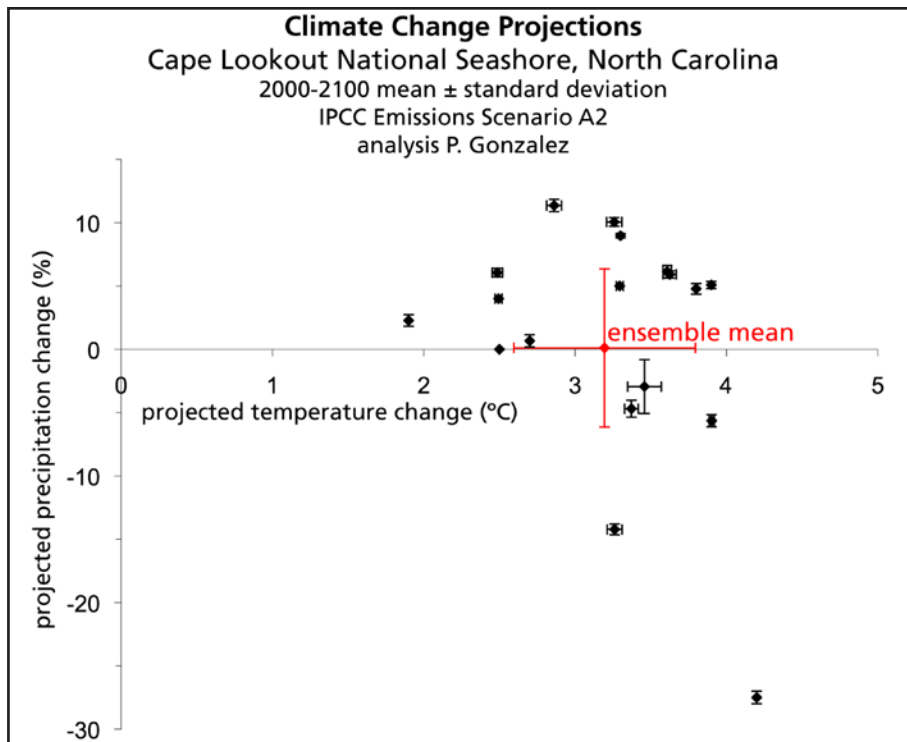


Figure 7. Climate Change Projections Scenario

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## APPENDIX D: INVENTORY OF PAST PLANNING DOCUMENTS AND ASSOCIATED RESOURCE STUDIES

Management Document: General	Date of Completion
Off-Road Vehicle Management Plan	Ongoing
Long-Range Interpretive Plan	June 2011
Commercial Services Plan	September 2008
Light Station Visitor Orientation Area Development Concept Plan	August 2005
Engineering Study of Cape Lookout Lighthouse	May 2005
Hearing Conservation Plan	2002
Amendment to the General Management Plan	2001
Statement for Management	April 1990
Amendment to the General Management Plan and Development Concept Plan	October 1983
Final General Management Plan and Development Concept Plan	December 1982
Draft General Management Plan, Wilderness Study, and Development Concept Plan	May 1980
Statement for Management	December 1976
Draft Master Plan	January 1973
Draft Master Plan	January 1971
Draft Master Plan	January 1968

Management Document: Cultural Resources	Date of Completion
Historic Structure Report: Jetty Worker's House #2	February 2012
Scope of Collections Statement	2011
Historic Resource Study	2011
Ethnohistorical Description of Four Communities Associated with Cape Lookout National Seashore	June 2009
Historic Structure Report: Cape Lookout Lighthouse	December 2008
Archeological Reconnaissance Survey for Shore Whaling Camps Associated with Diamond City	August 2007
Cape Lookout Village Historic Structures Reuse Implementation Plan	July 2007
Historic Structure Report: Portsmouth Life-Saving Station	2006
Portsmouth Village Cultural Landscape Report	May 2005
Cape Lookout Village Cultural Landscape Report	May 2005
Historic Structure Report: O'Boyle-Bryant House	2004
Historic Structure Report: Lewis-Davis House	2004
Historic Structure Report: Guthrie-Ogilvie House	2004
Historic Structure Report: Gaskill-Guthrie House	2004
Historic Structure Report: Coca-Cola House	2004
Historic Structure Report: 1907 Keepers' Quarters Dwelling	2004
Historic Structure Report: Washington Roberts House	2003
Historic Structure Report: Fishing Cottage #2	August 2003
Historic Structure Report: Cape Lookout Life-Saving Station	August 2003

Historic Structure Report: Life-Saving Station Boat House	August 2003
Historic Structure Report: Ed Styron House	August 2002
Historic Structure Report: George Dixon House	April 2002
Historic Resource Study: The Gun Mounts at Cape Lookout	March 1986
Historic Resource Study: Portsmouth Village	March 1982
The History of Portsmouth, NC From Its Founding in 1753 to Its Evacuation in the Face of Federal Forces in 1861 (Thesis)	1974
A Survey History of Cape Lookout National Seashore	January 1968

<b>Management Document: Natural Resources</b>	<b>Date of Completion</b>
United States Fish and Wildlife Service Recovery Plan (for protected species)	(unknown)
Horse Management Plan	(unknown)
Draft Wildland Fire Management Plan	2010
Interim Protected Species Management Plan	June 2007
Harkers Island Shore Protection Project	August 2006
Wilderness Recommendation	August 1985
Wilderness Suitability Study and Proposal	March 1984
The Impact of Off-Road Vehicles on Beach Invertebrates of the Cape Lookout	September 1983
Effects of Off-Road Vehicles on the Vegetation of Core Banks, Cape Lookout National Seashore	August 1983
The Effects of Off-Road Vehicles on the Environments and Organisms of Cape Lookout National Seashore	November 1980
Draft Fire Management Plan	December 1978
Natural Resources Management Plan	December 1976

<b>Management Document: Emergency Response</b>	<b>Date of Completion</b>
Hurricane Evacuation Plan	2012
Storm Recovery Plan	2011
Bloodborne Pathogen Exposure Control Plan	2002
Safety Action Plan	2001
Hazard Communications Plan	2001

<b>Management Document: Operations</b>	<b>Date of Completion</b>
Passenger Ferry Departure Site Study (Note: Environmental Assessment/Assessment of Effect Finding of No Significant Impact (FONSI) signed August 2011)	Ongoing
Spill Planning, Control, and Contingency (SPCC) Plan	2012
Continuity of Operations Plan	2011

<b>Management Document: Transportation</b>	<b>Date of Completion</b>
Beaufort Passenger Ferry Departure Site and Building Improvements	Ongoing
Beaufort Post Office—Passenger Ferry Departure Site: Concept Design Workshop Summary Report	Ongoing
Draft Alternative Transportation Plan	Ongoing
Alternative Transportation—Transportation Advisory Group Report	2008

## APPENDIX E: INVENTORY OF PROPOSED WILDERNESS DESIGNATION, SPECIAL MANDATES, AND COMPENDIUMS

Applicable Mandates and Agreements	Date	Description
Wilderness Recommendation for Shackleford Banks	August, 1985	Recommended the 2,990-acre Shackleford Banks for wilderness designation
General permit between Cape Lookout National Seashore and the United States Army Corps of Engineers (USACE)	February 6, 1986	Allows Cape Lookout National Seashore to conduct activities within the permit's general categories that would have only minimal individual or cumulative adverse environmental effects
Endangered Species Permit between North Carolina Wildlife Resources Commission and Cape Lookout National Seashore	April 11, 1989–December 31, 1989	Allowed Cape Lookout National Seashore personnel the ability to relocate sea turtle nests and the ability to possess, transport, and dispose of living and deceased sea turtles
Partnership with the Foundation for Shackleford Horses	July 16, 1998	Mandated partnership with the nonprofit Foundation for Shackleford Horses (or other qualified entity) to manage the seashore's wild horses, consistent with PL 105-202
Cape Lookout National Seashore Personal Watercraft Use—Final Rule (36 CFR Part 7)	September 8, 2006	<p>Implemented provisions of NPS regulations authorizing seashore areas to allow the use of personal watercraft (PWC)</p> <p>Final rule rewritten to clarify the type of PWC use prohibited and locations within the national seashore where it is permitted:</p> <p>(1) PWC must be operated at flat-wake speed                      (2) PWC must travel perpendicular to shore                      (3) PWC may only be operated within the seashore to access the following sound side special use areas:</p> <p><b><i>North Core Banks (access points)</i></b></p> <ul style="list-style-type: none"> <li>• Ocracoke Inlet</li> <li>• Mile Post 11B</li> <li>• Long Point</li> <li>• Old Drum Inlet</li> </ul> <p><b><i>South Core Banks (access points)</i></b></p> <ul style="list-style-type: none"> <li>• New Drum Inlet</li> <li>• Great Island Access</li> </ul> <p><b><i>Cape Lookout (access points)</i></b></p> <ul style="list-style-type: none"> <li>• Lighthouse North</li> <li>• Lighthouse South</li> <li>• Power Squadron Spit</li> </ul> <p><b><i>Shackleford Banks (access points)</i></b></p> <ul style="list-style-type: none"> <li>• West End Access</li> </ul>
<b>Jurisdictional Compendium</b>	January 23, 2009	Identifies forms of legal jurisdiction on all lands and waters managed by the seashore. Outlines the authority of NPS rangers to act outside seashore boundaries and identifies the authorities of other federal, state, and local law enforcement agencies to perform activities within the seashore.
<b>Compendium of Designations, Closures, Request Requirements, and Other Restrictions Imposed Under the Discretionary Authority of the Superintendent</b>	March 4, 2011	Limits off-road vehicle use; boat, personal watercraft, and dock use; cleaning fish; hunting; firearms; swimming; and other public use limits.



## APPENDIX F: INVENTORY OF AGREEMENTS

Type of Agreement	Date Signed	Expiration	Description
Memorandum of Understanding between Cape Lookout National Seashore and Carteret County Emergency Communications Dispatch Services	1/5/2011	1/1/2013	Allows Carteret County to provide standard dispatch services to all agencies operating within the county as approved by the Carteret 911 Communications Committee in February 2009.
Special Use Permit between Cape Lookout National Seashore and the USFWS-Cedar Island	1/1/2011	12/31/2011	Provided NPS personnel with storage space and a staging area on Lola Road for operations at Long Point Cabin Camps on North Core Banks.
Memorandum of Understanding between NPS and USFWS to Promote Conservation of Migratory Birds	4/12/2010	4/12/2020	Strengthens migratory bird conservation by identifying and implementing strategies to support existing efforts, and facilitate new collaborative migratory bird conservation partnerships.
General Agreement between Cape Lookout National Seashore and the Carteret County Sheriff's Department	5/14/2009	5/15/2014	Establishes standards, terms, and conditions under which the Carteret County Sheriff's Department will provide dispatch service to the emergency services staff at Cape Lookout National Seashore.
Cooperative Agreement between NPS and Core Sound Waterfowl Museum and Heritage Center	9/25/2008	Remains in effect until project is completed	Develops Parks as Classrooms curriculum and activity guides and interactive web based activities for Cape Lookout National Seashore using the North Carolina Standard Course of Study, which targets kindergarten, 4th, and 6th grades. (PMIS project #103079)
Agreement between Cape Lookout National Seashore, NPS Harpers Ferry Center (HFC), and the Core Sound Waterfowl Museum and Heritage Center	4/2/2008	9/30/2010	Facilitated cooperation between the Core Sound Waterfowl Museum and Heritage Center and the HFC to provide technical assistance for exhibit planning and program development. The agreement provided a mechanism for the HFC to bill the Core Sound Waterfowl Museum and Heritage Center for services rendered over a specific period of time.
Cooperative Agreement between the NPS and Core Sound Waterfowl Museum and Heritage Center	12/16/2005	12/16/2007	Provided increased Americans with Disabilities Act (ADA) access to the Core Sound Waterfowl Museum and Heritage Center by constructing an elevator to provide improved access to the scenic overlook. The project used matching funds.
General Agreement between the NPS and Friends of Portsmouth Island, Inc.	6/24/2004	6/24/2007	Acknowledged and endorsed Friends of Portsmouth Island activities relating to Cape Lookout National Seashore.
Cooperative Agreement between Cape Lookout National Seashore, Cape Hatteras National Seashore, Cumberland Island National Seashore, and the Cooperative Ecosystem Studies Unit	8/21/2003	9/30/2007	Documented the presence of all species of bats that occur within the boundaries of Cape Hatteras and Cape Lookout National Seashore. These items were modified from the original agreement.
Cooperative Agreement between Cape Lookout National Seashore, Cape Hatteras National Seashore, Cumberland Island National Seashore, and the Cooperative Ecosystem Studies Unit	8/15/2003	9/30/2005	Assisted water resources studies for current conditions within the listed coastal park units, and identified coastal water bodies and watersheds that are seriously impacted or threatened.

Type of Agreement	Date Signed	Expiration	Description
Interagency Agreement for fire management between the NPS, USFWS, Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), and U.S. Forest Service (USFS)	10/1/2002	9/30/2008	Provided mutual assistance to wildland fire management for agencies regarding fire management planning, fire use, and fire suppression to achieve land management goals.
Cooperative Agreement between Cape Lookout National Seashore, Cape Hatteras National Seashore, Cumberland Island National Seashore, and the Cooperative Ecosystem Studies Unit	8/2/2002	8/2/2007	Assisted water resources studies for current conditions within the listed coastal park units, and identified coastal water bodies and watersheds that are seriously impacted or threatened.
Memorandum of Understanding between NPS and Princeton University	5/3/2001	5/3/2006	Recognized and formalized the existing relationship between Princeton University and Cape Lookout National Seashore for mutual assistance in conducting educational endeavors, research and other studies at the seashore.
Cooperative Agreement between NPS and the University of Georgia Research Foundation	4/24/2001	4/24/2006	Allowed the University of Georgia affiliate office, Savannah River Ecology Laboratory, to conduct herpetological inventories for the 16 NPS park units of the Southeast Coastal Network.
General Agreement between NPS and National Estuarine Research Reserve	2/9/2001	2/3/2006	Recognized and formalized the relationship between Cape Lookout National Seashore and Rachel Carson for the purposes of administering birth control to the Rachel Carson horses.
Cooperative Agreement between NPS and State of North Carolina Veterinary Division	9/30/2000	9/30/2005	Recognized and formalized the relationship between Cape Lookout National Seashore and the State of North Carolina Veterinary Division to request the State to provide appropriate personnel, equipment, and veterinary services needed to manage the Shackleford Horse herd.
General Agreement between the NPS and the NOAA Marine Sanctuaries Division	6/2/2000	6/2/2005	Created a partnership between the NPS and the NOAA Marine Sanctuaries Program to achieve a higher level of marine resource protection and conservation.
General Agreement between NPS Southeast Regional Office (SERO) and Clemson University	3/28/2000	3/28/2005	Recognized and formalized the existing relationship between Clemson University and the Cape Lookout National Seashore for mutual assistance in conducting educational endeavors, research and other studies at the seashore.
Agreement between the NPS and Clean Beaches Council (CBC)	1/1/2000	1/1/2005	Initiated policies, principles, and procedures the NPS and CBC could mutually agree upon for the purpose of providing resources that protect and preserve America's coastal heritage.
Agreement between the Geography Department of the Moscow Federal Pedagogical University and the United States of America	8/27/1999	9/16/1999	Allowed a Russian exchange intern to work at Cape Lookout National Seashore for a specific period of time. The internship program stemmed from a pre-existing agreement between the Geography Department of the Moscow Pedagogical University of the Russian Federation and the Russian/American Parks and Environmental Exchange Program of the United States of America.
Interagency Agreement between NPS and the Occupational Safety and Health Administration (OSHA)	10/6/1998	10/6/2003	Allowed OSHA to provide the NPS assistance in improving its employee safety and health programs in selected parks.

Type of Agreement	Date Signed	Expiration	Description
Memorandum of Agreement between Cape Lookout National Seashore and Performance East	6/11/1998	11/15/1998	Allowed law enforcement officers at Cape Lookout National Seashore to use personal watercraft, supplied by Performance East, for search, rescue, and law enforcement patrol activities.
Interagency Agreement between NPS SERO and the Department of Energy—Federal Energy Technology Center (FETC)	6/30/1997	6/30/2003	Allowed the FETC to provide technical and administrative support and assistance to the NPS on a variety of NPS projects.
Memorandum of Understanding between NPS and Cape Lookout Environmental Education Center, Inc.	4/18/1995	3/27/2007	Provide environmental education to students through the Cape Lookout Environmental Education Center located on South Core Banks.
Memorandum of Understanding regarding the designation of NPS employees as customs officers in the eastern district of North Carolina	12/19/1994	Remains in effect until terminated	Designates NPS law enforcement personnel as U.S. Customs Officers to provide enforcement of laws pertaining to narcotics, marijuana, and drug smuggling.
Memorandum of Understanding between Cape Lookout National Seashore and Carteret General Hospital	5/23/1994	5/16/2004	Allowed Carteret General Hospital to provide medical assistance to NPS personnel for medical emergencies.
Memorandum of Understanding between NPS and the North Carolina Maritime Museum	3/1/1994	2/28/2009	Allowed the North Carolina Maritime Museum to use the Cape Lookout Coast Guard Station. Provided access easements to the station by use of the former Coast Guard dock and all of the associated, authorized roads and trails for the sole purpose of conducting environmental education and research classes on the natural, cultural and marine resources of the seashore.
Memorandum of Understanding between NPS and Core Sound Waterfowl Museum and Heritage Center	11/30/1993	11/30/2023	Allows the Core Sound Waterfowl Museum and Heritage Center the right to use a portion of the tract of land adjacent to the Cape Lookout National Seashore headquarters for a period of 30 years.
Memorandum of Understanding between NPS and Federal Bureau of Prisons (FBOP)	11/12/1992	11/12/1993	Allows the FBOP to use inmate crews within selected NPS units to assess the feasibility of inmate work programs and their appropriateness to the maintenance requirements of the NPS.
Memorandum of Understanding between U.S. Department of the Interior (DOI) and U. S. Coast Guard	6/19/1992	Remains in effect until terminated	Provides for the mutual use of aircraft support when conducting joint law enforcement operations when such activities are mutually beneficial and contribute to the support and achievement of the agencies' primary missions, goals and objectives.
Memorandum of Understanding between NPS, U. S. Geological Survey, BLM, and USFS for fossil management on public lands	5/4/1992	5/4/1997	Provided procedures and guidance for communication, cooperation, and research regarding issues of common concern in the management of paleontological resources.
Memorandum of Understanding between NPS, U. S. Drug Enforcement Administration, and U. S. Department of Justice	11/20/1991	Remains in effect until terminated	Provides joint law enforcement operations when such activities are mutually beneficial to the agencies involved.

Type of Agreement	Date Signed	Expiration	Description
Memorandum of Understanding between the NPS and U. S. Marine Corps (USMC)	9/10/1991	Remains in effect until terminated	Allows USMC designation of a military operating area over a 30-mile portion of Core Banks. Provides airspace use over Cape Lookout while mitigating the impacts of training overflights to the extent possible in compliance with Cape Lookout National Seashore’s enabling legislation.
Memorandum of Understanding between DOI and the Department of Defense (DOD)	7/25/1990	Remains in effect until terminated	Provides DOD aircraft support for DOI drug enforcement operations on federal lands.
Interagency Agreement between the DOI and U. S. Department of Agriculture (USDA)	2/27/1990	2/27/1995	Provided a specified cross-designation of powers and authorities of law enforcement personnel among certain agencies of the USDA and DOI.
Memorandum of Agreement between NPS and the State of North Carolina Department of Natural Resources and Community Development (NCDNRCD)	10/16/1989	10/16/1994	Recognized the necessity for ecologically sound regional planning to perpetuate and restore areas of diverse and abundant fish and wildlife resources. Indicated desire to conduct cooperative endeavors which focused the skills and abilities of the state and NPS to solve mutual fish and wildlife problems. Set goal to achieve optimum public benefits from fish and wildlife resources, and ensure respective objectives were fulfilled.
Memorandum of Agreement between State of North Carolina and the federal government	3/7/1989	Remains in effect until terminated	Obtain donated, submerged lands and shore lands in surrounding Shackleford Banks and the lands on the eastern end of Harkers Island, within 150 feet from the mean low water mark, for inclusion within Cape Lookout National Seashore.
Cooperative Agreement between Cape Lookout National Seashore, Cape Hatteras National Seashore, Naval Air Station, USFWS, USACE, National Marine Fisheries Service, State of North Carolina—Division of Coastal Management, Division of Marine Fisheries, Wildlife Resources Commission, and North Carolina News Network	1/26/1989	Remains in effect until terminated	Implements a program for the protection and management of the colonial nesting waterbirds of coastal North Carolina.
Cooperative Agreement between NPS and NCDNRCD	9/11/1987	9/11/1992	Provided cost-sharing protocol for initial expense of dredging the NPS concession ferry channel north of New Drum Inlet and constructing a bulkhead in the docking basin associated with that channel.
Memorandum of Understanding between NPS and BLM	1/29/1987	1/1/1991	Developed policies for coordinating BLM and NPS planning and other programs on a continuing basis. Memorandum of Understanding also established the policy framework for formal and informal coordination and communication between officials at every level of the BLM and NPS.
Memorandum of Understanding between NPS and USFS	1/24/1986	(unknown)	Provides mutual cooperation to improve overall public service and effectively protect and manage natural resources.
Interagency Agreement between the NPS and the NOAA National Data Buoy Center	10/18/1984	7/2/2006	Authorized NOAA to provide and maintain a remote meteorological station on Cape Lookout National Seashore property.

Type of Agreement	Date Signed	Expiration	Description
Memorandum of Agreement for concurrent jurisdiction at national park system units with the State of North Carolina	8/6/1984	Remains in effect until terminated	Provides a uniform system of concurrent jurisdiction for all areas of the National Park System within the State of North Carolina. The uniform reduces law enforcement response time; reduces associated costs to the public; and promotes the public welfare and enjoyment of the areas.
Memorandum of Understanding between NPS and Carteret County Parks and Recreation Department (CCP&RD)	5/14/1984	3/1/1994	Allowed the CCP&RD to provide general maintenance and upkeep of two tennis courts on Harkers Island for the use of the general public.
Interagency Agreement between NPS and U.S. Department of the Navy	12/6/1983	12/6/1988	Allowed the Department of the Navy to install, operate and maintain a Raydist antenna on the Harkers Island administrative site.
Interagency Agreement for meteorological services in support of agencies with land management and fire protection responsibilities	6/8/1983	Remains in effect until terminated	National Weather Service (NWS) will provide basic meteorological services to agencies responsible for land management and fire management during normal working hours. Agreement is in accordance with Operating Plans for designated NWS offices to the extent that NWS can provide meteorological and fire related resources.
Interagency Agreement between Cape Lookout National Seashore and the North Carolina Natural Heritage Program	5/26/1983	Remains in effect until terminated	Protect and perpetuate the natural resources and values of the Cape Lookout area. Cape Lookout National Seashore agrees it will manage the designated natural areas for educational, scientific, ecological, and compatible recreational purposes without alteration or disturbance of habitats, native plants, or animal populations.
Interagency Agreement between NPS and USFS	8/17/1981	Remains in effect until terminated	Provide cooperative efforts in the full spectrum of fire management activities at the national, regional, and field levels to facilitate efficient use of personnel, supplies, and equipment.
Memorandum of Understanding between NPS and NCDNRCD	6/8/1980	11/5/1984	Recognized the necessity for ecologically sound regional planning to perpetuate and restore areas of diverse and abundant fish and wildlife resources. Indicated desire to conduct cooperative endeavors, which focused the skills and abilities of the state and NPS to solve mutual fish and wildlife problems. Set goal to achieve optimum public benefits from fish and wildlife resources, and ensure respective objectives were fulfilled.
Memorandum of Agreement between North Carolina NPS sites and the USFS pertaining to the NCDNRCD	11/27/1979	11/27/1984	Formulate guidelines among cooperating agencies for the planning, development, protection, administration and use of the Mountains-to-Sea Trail.
Cooperative Agreement between Cape Lookout National Seashore and North Carolina Division of Forest Resources	2/20/1978	Remains in effect until terminated	Provide mutual aid for the prevention and control of fires occurring near the boundaries of adjoining lands protected by the two agencies.
Memorandum of Agreement between Cape Lookout National Seashore and Cape Hatteras National Seashore for the mutual use of Cape Hatteras' aircraft	12/14/1976	Remains in effect until terminated	Provide Cape Lookout National Seashore with aerial support for business operations within the seashore. Such services include routine or special aerial patrols, transport of personnel, and transport of materials.

Type of Agreement	Date Signed	Expiration	Description
Memorandum of Understanding between NPS and NCDNRCD	6/8/1976	6/8/1980	Recognized the necessity for ecologically sound regional planning to perpetuate and restore areas of diverse and abundant fish and wildlife resources. Indicated desire to conduct joint and cooperative endeavors which focused the skills and abilities of the state and NPS toward solving mutual fish and wildlife problems, achieving optimum public benefits from fish and wildlife resources, and ensuring the respective objectives and responsibilities of the state and NPS were fulfilled.
Cooperative Agreement between Cape Lookout National Seashore, NPS, and State of North Carolina Department of Natural and Economic Resources (NCDNER)	6/8/1976	Remains in effect until terminated	Facilitate cooperation between NCDNER and NPS to manage, propagate, and protect resident species of fish and wildlife found within the boundaries of Cape Lookout National Seashore.
Memorandum of Understanding between the NPS and the State of North Carolina Departments of Natural and Economic Resources, and Wildlife Resources Commission	6/8/1976	Remains in effect until terminated	Consult on fish and wildlife research and programs and encourage joint publication of policies and objectives. Agencies will meet regularly to evaluate and make recommendations for control, protection and optimum utilization of fish and wildlife populations and ecological balance of areas within and directly affecting seashore lands.
Memorandum of Agreement between the State of North Carolina and the federal government	6/7/1976	Remains in effect until terminated	Obtain donated submerged lands and shore lands in the Atlantic Ocean and Core Sound, within 150 feet from the mean low water mark at Cape Lookout Point to south of Orcacoke Inlet, for inclusion within Cape Lookout National Seashore.
Memorandum of Agreement between Cape Lookout National Seashore and the NCDNRCD	6/3/1976	Remains in effect until terminated	Provides an act to authorize the State of North Carolina to acquire lands for the establishment of Cape Lookout National Seashore.
Memorandum of Agreement between NPS and the State of North Carolina	6/3/1976	Remains in effect until terminated	Provides the transfer of lands on Core Banks, and boundaries on Shackleford Banks and Harkers Island; a 500 ft petroleum pipeline easement, rights of occupancy for former owners, removal of abandoned vehicles, inspection and disposition of 3rd party interest facilities, and identification of claimants against State title.
Memorandum of Understanding between NPS and USFWS	7/10/1975	Remains in effect until terminated	Provides mutual assistance between agencies to conduct research and by provide technical advice and services required to preserve and to manage the fish and wildlife resources on administered lands.
Cooperative Agreement between NPS and Telephone Pioneers of America	1/1/1962	(unknown)	Provide the NPS with a volunteer workforce to help improve visitor facilities to improve access for people with disabilities.

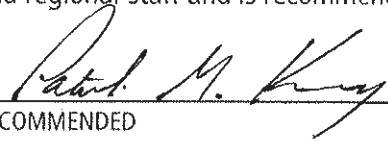
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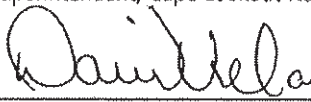
## Southeast Region Foundation Document Recommendation Cape Lookout National Seashore

October 2012

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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.

 *OCTOBER 16, 2012*  
RECOMMENDED Date  
Superintendent, Cape Lookout National Seashore

 *October 16, 2012*  
APPROVED Date  
Regional Director, Southeast Region



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.

623/117007; October 2012

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