



## Commercial Services Plan / Environmental Assessment / Assessment of Effect





# Commercial Services Plan / Environmental Assessment / Assessment of Effect

## Cape Lookout National Seashore

### Carteret County, North Carolina

Cape Lookout National Seashore, occupying more than 28,000 acres of land and water, is in Carteret County, North Carolina. The narrow barrier islands are characterized by wide, bare sand beaches with low dunes covered by scattered grasses, flat grasslands bordered by dense vegetation, and large expanses of salt marsh alongside the sound. There are no bridges or causeways linking the islands to each other or the mainland, and visitors reach the islands by ferry or private boat. Congress authorized the National Park Service to work with private or corporate entities to provide visitor services. Existing commercial visitor services at the national seashore include passenger and vehicle ferry services. The operation of overnight cabin accommodations and gas / convenience item sales at the Long Point and Great Island camps are included in these services.

Eight commercial use authorizations have been issued to provide passenger ferry service to the national seashore from lands and facilities outside the national seashore. Various other commercial visitor services are also authorized under these instruments, including guided recreational and educational activities, land transportation and shuttle services on the islands, and kayak rentals. A moratorium on additional commercial use authorizations will remain in place until this *Commercial Services Plan* is completed.

The National Park Service proposes to authorize and implement the actions necessary to authorize commercial visitor services at the national seashore in accordance with applicable NPS policies and the national seashore's purpose, significance, and mission goals. The types and levels of commercial activities that are necessary and appropriate for fulfilling visitor use objectives will be determined by guidance in this plan. The plan will identify and support the selection of an alternative that will guide the management of commercial visitor services over about the next 10 years. A study analyzed the financial feasibility of the alternatives considered in this plan. The study concluded, among other things, that commercial services should be grouped geographically.

Under alternative A, the current scope and level of commercial visitor services would continue without substantial modification. This alternative serves as the baseline for comparing the actions and associated impacts of the other alternatives.

Under alternative B, the national seashore would provide enhanced commercial visitor services by improving management and operations of these services. Ferry and land transportation services would be expanded to enhance visitor exploration throughout the national seashore. As necessary and appropriate, additional support facilities, services, and rentals would be provided at existing arrival locations. Opportunities would remain for those seeking solitude and self-directed activities, and a diverse range of other appropriate facilitated activities would be provided that could incorporate concession-guided services such as special events, cultural demonstrations, kayak tours, nighttime hikes, and lighthouse/historic district tours.

Under alternative C (as under alternative B), the national seashore would improve the management and operation of commercial visitor services. Ferry and land transportation services would be expanded to facilitate visitor exploration throughout the national seashore. As necessary and appropriate, additional support facilities and services would be provided at existing arrival locations. Opportunities would remain for those seeking solitude and self-directed activities, and a diverse range of other appropriate activities would be provided that could incorporate concession-guided services (e.g., special events, cultural demonstrations, kayak tours, nighttime hikes, and lighthouse and historic district tours). Reserved ferry service could be provided to facilitate specialized activities, such as eco-tours that focus on particular areas or resources of the national seashore.

Several actions proposed for alternatives B and C are the same. However, alternative C would provide visitors with the highest level of in-depth and diverse experiences with emphasis on facilitated group tours and activities and would also have a slightly greater degree of facility development in support of commercial visitor services.

This *Commercial Services Plan* has been distributed to other agencies and interested organizations and individuals for their review and comment. The public comment period for this document will last for 30 days after the document has been distributed to the public. Please refer to the next page to see "How to Comment on this Plan."

## HOW TO COMMENT ON THIS PLAN

Comments on this plan are welcome and will be accepted for 30 days after the document is distributed to the public. Comments/responses to the material may be submitted either over the Internet or in writing. Please comment only once.

Please include your name and address on any correspondence to be sure that you are included on our mailing list.

Commenters are encouraged to use the Internet if at all possible.

Internet comments can be submitted at [www.nps.gov/cal/parkmgmt/planning.htm](http://www.nps.gov/cal/parkmgmt/planning.htm) and then choose the “Commercial Services Plan.”

Written comments may be sent to

National Park Service  
Denver Service Center  
M. DeLaura, DSC-P  
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PO Box 25287  
Denver, CO 80225-9901

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment — including your personal identifying information — may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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**CHAPTER 1:  
PURPOSE OF  
AND NEED  
FOR  
THE PLAN**





## PURPOSE AND NEED FOR ACTION

### BRIEF DESCRIPTION OF THE AREA

Cape Lookout National Seashore is in Carteret County, North Carolina, and is comprised of barrier islands about 3 miles off the mainland coast (see Location map). Occupying more than 28,000 acres of land and water from Ocracoke Inlet on the northeast to Beaufort Inlet on the southwest, the national seashore consists of four main barrier islands (North Core Banks, Middle Core Banks, South Core Banks, and Shackleford Banks). The narrow barrier islands are characterized by wide, bare sand beaches with low dunes covered by scattered grasses, flat grasslands bordered by dense vegetation, and large expanses of salt marsh alongside the sound. There are no bridges or causeways linking the islands to each other or the mainland, and visitors can only reach the islands by ferry or private boat.

Various historic maritime activities have occurred within the national seashore, and the islands currently attract visitors seeking diverse recreational opportunities. The harsh environment and relative isolation of the islands limited human settlement to Cape Lookout Village and Portsmouth Village (located respectively at the southern and northern ends of the national seashore). Consequently the natural environment and ecosystems remain largely intact and undisturbed throughout the national seashore.

### PURPOSE AND NEED FOR THE ACTION

The National Park Service (NPS or Park Service) proposes to authorize and implement the actions necessary to conduct commercial visitor services at Cape Lookout National Seashore. The types and levels of commercial activities that are necessary and appropriate for fulfilling visitor use objectives will be

determined by guidance provided in this *Commercial Services Plan* and in accordance with applicable NPS policies and the national seashore's purpose, significance, and mission goals. The plan will identify and support the selection of an alternative that will guide the management of commercial services over approximately the next 10 years.

In conformance with the National Park Service Concessions Management Improvement Act of 1998 (Public Law 105-391) and 36 *Code of Federal Regulations* (CFR) 51, NPS *Management Policies 2006*, and NPS Director's Order 38, this action is necessary to ensure that the commercial visitor services and support facilities provided at the national seashore are necessary and appropriate for public use and enjoyment, provide a reasonable opportunity for profit, and are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit. Actions considered by the *Commercial Services Plan* may include new services and/or improvements to existing services to achieve future goals for the national seashore. The national seashore's existing concessions contracts expired some years ago, and until recently both concessions were operating under one-year continuation of services letters. Since 2005 the Davis to Great Island concession has been operating under a three-year temporary concessions contract. It is important to provide guidance for the future management of commercial visitor services within the national seashore under contracts and commercial use authorizations and to ensure continuity of services in support of quality visitor experiences.

### COMMERCIAL SERVICES BACKGROUND

The National Park Service Concessions Management Improvement Act of 1998 guides

the management of commercial services in units of the national park system. The law requires that all commercial visitor services in national park units be authorized in writing by the superintendent and that planning supports that authorization. *NPS Management Policies 2006* state that planning for commercial visitor services will identify the appropriate role of commercial operations in helping park units achieve desired visitor experience objectives and will be integrated into other plans and planning processes. Consistent with a park unit's enabling legislation and *General Management Plan*, commercial services plans will support the park unit's purpose and significance, fundamental resources and values, and visitor experience objectives. These plans also will determine whether a proposed or existing commercial service is necessary and appropriate and consider and evaluate a range of potential management alternatives. Proposed concession operations must be economically feasible and are generally supported by a feasibility study of the alternatives.

Congress authorized the National Park Service to contract with a person, corporation or other entity to provide accommodations, facilities and services to visitors. However, these accommodations, facilities, and other services are limited to those that are

necessary and appropriate for public use and enjoyment of the unit of the National Park System in which they are located; and are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit.

(National Parks Omnibus Management Act of 1998, Title IV — National Park Service Concessions Management Improvement Act)

Congress has further stated that these visitor services

should be provided only under carefully controlled safeguards against unregu-

lated and indiscriminate use so that heavy visitation will not unduly impair these values and so that development of such facilities can best be limited to locations where the least damage to park values will be caused.

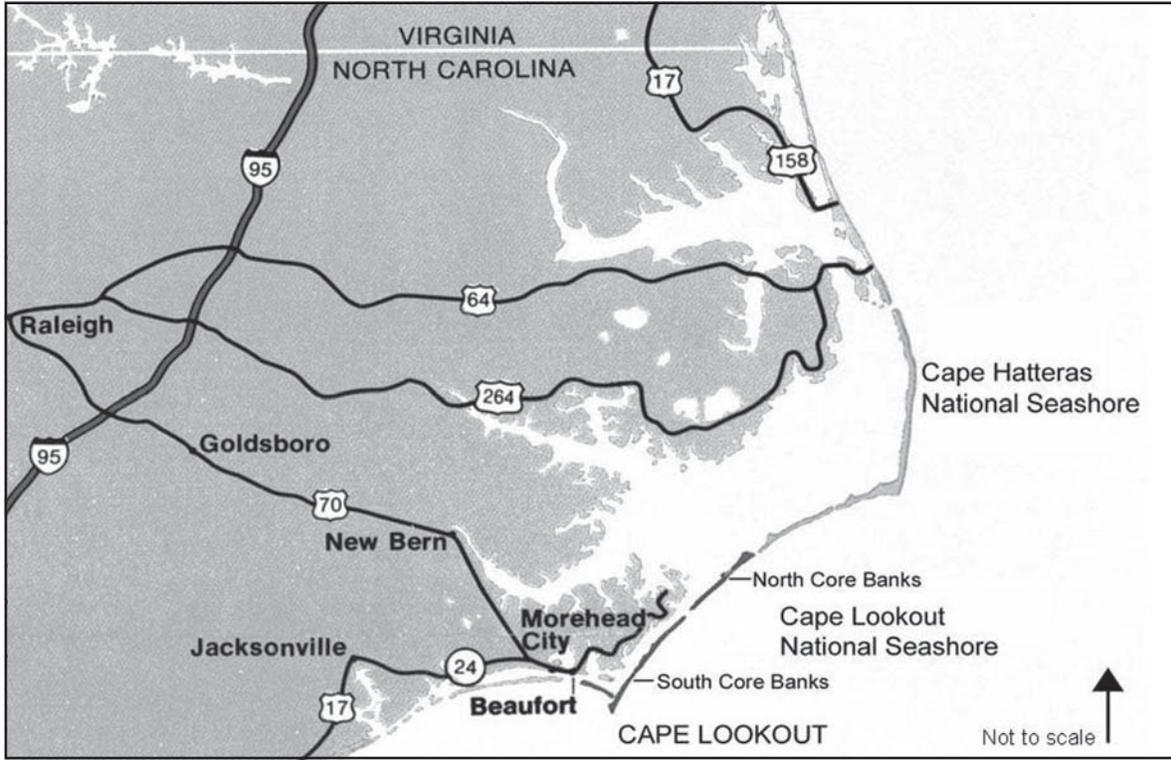
(Public Law 89-249)

The instruments used to provide commercial visitor services are commercial service agreements that include but are not limited to contracts, commercial use authorizations, and special use permits. These agreements are managed in each park unit according to federal law, NPS policies, and the purpose and significance of each unit.

Units of the national park system develop commercial service plans to identify the necessary and appropriate services that can be provided by commercial operators to make opportunities available for visitor use and enjoyment. The number, location, and size of facilities and sites used for concession operations will be the minimum necessary for proper and satisfactory operation of the facilities (*NPS Management Policies 2006 10.2.2*).

Commercial services planning will guide future decisions on whether to authorize or expand commercial visitor facilities and services at a park unit. The decision to authorize or expand a park concession will consider the effect on or need for additional infrastructure and management of operations and be based on a determination that the facility or service

- is compatible with enabling legislation,
- is complementary to the park's mission and visitor service objectives,
- is necessary and appropriate for the public use and enjoyment of the park in which it is located,



**Location**  
**Cape Lookout National Seashore**  
United States Department of the Interior  
National Park Service



- is not, and cannot be, provided outside of park boundaries,
- incorporates sustainable principles and practices in planning, design, siting, construction, and maintenance,
- adopts appropriate energy and water conservation, source reduction, and environmental purchasing standards and goals, and
- will not increase unacceptable impacts.

The National Park Service evaluates and develops the requirements for commercial visitor services using a variety of tools including market and financial feasibility studies/analyses. Under the terms of their commercial instruments, operators must also comply with NPS regulations and policies relative to standards for quality of service and reasonableness of rates, including standards for facility and accessibility requirements, resource protection, orientation and interpretation to visitors, and reporting and record keeping.

Consideration of revenue to the United States is subordinate to the objectives of protecting and preserving park areas and providing necessary and appropriate services for visitors at reasonable rates. However, as stated in NPS *Management Policies 2006*, franchise fees will be determined to provide a fair compensation to the United States for the value received by concessioners for the privileges provided by holding the concession contract, which may include use of NPS facilities and resources. Commercial use authorization holders pay a reasonable fee to the park unit to cover, at a minimum, the cost of managing and administering the authorization.

Existing commercial visitor services at the national seashore include services provided through two concession contracts for passenger and vehicle ferry service between (1) the mainland at Atlantic, North Carolina, and Long Point on North Core Banks, and (2) between the mainland at Davis, North Carolina, and Great Island on South Core

Banks. These contracts also include the operation of overnight cabin accommodations and gas / convenience item sales at the Long Point and Great Island camps. The concessions contracts expired some time ago, and until recently both concessions were operating under one-year continuation of services letters. Since 2005 the Davis to Great Island concession has been operating under a three-year temporary concessions contract. This concessions contract will expire May 15, 2008. The one-year extension of services letter for the Atlantic to Long Point contract will expire on December 31, 2007. Eight commercial use authorizations (CUAs) are currently issued for passenger ferry service to the national seashore — four ferries operate from Harkers Island to the Cape Lookout lighthouse area and Shackleford Banks, three ferries operate from Beaufort to the lighthouse area and Shackleford Banks, and one operates from Ocracoke to Portsmouth Village. A passenger ferry that formerly operated from Morehead City is currently not in service. A variety of other commercial services are also authorized under commercial use authorizations, including guided recreational and educational activities, land transportation and shuttle services on the islands, and kayak rentals. A moratorium on additional commercial use authorizations will remain in place until this *Commercial Services Plan* is completed.

## **GUIDING LAWS, REGULATIONS, AND POLICIES**

All operations and activities at Cape Lookout National Seashore are under the authority of the 1916 Organic Act that created the National Park Service and the 1966 enabling legislation (Public Law 89-366) that authorized the establishment of the national seashore. Policies specifically directing the management of the seashore can be found in the 1982 *General Management Plan / Development Concept Plan* and the 2001 *General Management Plan Amendment*.

In addition, several laws and policies are directly concerned with managing commercial activities in national park system units. Regulations with specific instructions on commercial services are located at 36 *Code of Federal Regulations* (CFR 51). The regulations state that all commercial visitor services in national park system units must be authorized in writing.

The Omnibus Park Management Act of 1998 was passed by Congress and signed into law November 13, 1998. The National Park Service Concessions Management Improvement Act of 1998 (Public Law 105-391) is the short title for Section IV of the Omnibus Act and deals directly with NPS commercial visitor services. This legislation supersedes the 1965 Concessions Policy Act, which guided NPS management of concessions for the previous 30 years. The 1998 legislation incorporates much of the philosophy of the 1965 act including that

development . . . shall be limited to those accommodations, facilities, and services that are necessary and appropriate for public use and enjoyment of the unit of the National Park System in which they are located and are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit.

In addition, the secretary of the interior should “exercise his authority in a manner consistent with a reasonable opportunity for the concessioner to realize a profit.” Therefore, only concession operations that provide this opportunity should be introduced.

The 1998 law also made some significant changes. Under the previous 1965 Concessions Policy Act, all existing concessioners had a “preferential right of renewal.” Under Section 403 of Public Law (PL) 105-391 only outfitter and guide services and small business operations with anticipated gross receipts under \$500,000 may be given a right of

preference in renewal of contracts. The term of new contracts will generally be 10 years or less, with up to 20-year contracts only issued when the terms of a concession contract require such a term, and only with approval from the secretary of the interior through the NPS director. Concession permits that were used for less complex operations will not be issued in the future. Category I, II, and III concession contracts are the three types of concession authorizations issued under the 1998 law and regulations. Compensation due to concessioners for investment in real property was previously defined as possessory interest. This was changed to leasehold surrender interest, a new term in contracts awarded under the 1998 law. Changes to the method of establishing the compensation amount due a concessioner were also made. Under the 1965 law, all franchise fees paid by a concessioner were sent to the General Treasury. Under the 1998 law, all franchise fees remain with the Park Service without further appreciation to be used for high priority visitor service or resource protection projects. The park unit that collects the fees retains 80%, and 20% is used to support activities throughout the national park system regardless of the unit in which the funds were collected. Regulations to implement the new law as it pertains to concessions, after consideration of public comments, were promulgated in 2000. In addition, standard contract language has also been written and approved to implement the Concessions Management Policy Act of 1998.

The 1998 act allows the secretary of the interior through the NPS director to issue commercial use authorizations. Prior to 1998, incidental business permits were used to authorize the provision of visitor services by commercial operators when the business began and ended outside the national seashore. The Organic Act provided authority to issue these short-term permits. Further, regulations exist that prohibit the provision of commercial visitor services without a permit (36 CFR 5.3.) One of the key differences in the

legislative authority under the 1998 act is that the secretary must limit the activity and permits if necessary to preserve the resources and values of the particular park unit. A reasonable fee to cover, at a minimum, will be charged to recover management and administrative costs (Public Law 105-391).

According to *NPS Management Policies 2006*, commercial activities are conducted under safeguards that protect against unregulated and indiscriminate use and ensure that heavy visitation does not impair a park unit's values and resources. The provision of commercial visitor services in park units — when determined to be necessary and appropriate to provide for visitor enjoyment and achieve the objectives of the park unit — is an option for management. Historically, the concessions program has been based on considerations such as visitor needs, the agency's ability to satisfy those needs, the resource itself, and the apparent user capacity. Changing conditions and increasing pressure to meet visitor needs requires a strategy that balances visitor needs with the purposes and values of individual park units.

NPS guidelines (director's orders) that are applicable to commercial services include the following:

- Director's Order 13A "Environmental Management Systems"
- Director's Order 48 "Concessions Guidelines"
- Director's Order 50 "Loss Control Management Program Guideline"
- Director's Order 83 "Public Health Management Guideline"

These guidelines, along with laws and policies, standard contract language, and operating procedures, are used in managing commercial activities throughout the national park system.

## COMMERCIAL SERVICES AUTHORIZATION INSTRUMENTS

### Concession Contracts

All concession operations must be approved and authorized by the National Park Service under delegation of authority through the preparation of a prospectus (solicitation of offers), NPS review of proposals, selection of the best offer, and final contract execution. The procedures are detailed in 36 CFR 51.4.

Concession contracts are legal agreements between the secretary of the interior (or authorized delegate) and a concessioner that requires the concessioner to provide certain visitor accommodations, facilities, or services in the park units. Some services are required and must be provided. Others are authorized and can be provided. Category I concession contracts are usually used for large, complex operations where there are land and/or facilities assigned and the concessioner is making capital improvements, which means there is leasehold surrender interest. Category II concession contracts are usually used for large, complex operations with land/facility assignments, but there is no capital improvement program or leasehold surrender interest. Category III concession contracts are usually used for less complex operations without land/facility assignments or leasehold surrender interest. Category III and sometimes Category II concession contracts replace what used to be called concession permits. By law, all contracts are issued by competitive bid. The typical term for a contract is 10 years or less, although under certain financial situations where a large capital investment is involved up to a 20-year term can be authorized with specific approval through the NPS director.

Contracts authorized under the 1965 law gave concessioners certain rights. New contracts do not include a preferential right of renewal except for guide services or operators with annual gross receipts less than \$500,000.

Concessioners are no longer given a preferential right of refusal for new or similar services (a virtual monopoly). In fact, the intent of the 1998 law is to encourage competition. NPS written approval must be given before a concessioner spends capital to make improvements to a NPS facility or builds a new facility. When the project is approved, the concessioner acquires a leasehold surrender interest in the facility until the interest is depreciated, bought out by the government, or acquired by a new concessioner.

Under the terms and conditions of a concession contract, the secretary has the authority to assign land and government improvements (facilities) to the concessioner as necessary and appropriate for conduct of operations. Concession contracts contain an operations plan, maintenance plan, environmental plan, and, in many instances, building improvement plans. The contracts require care of land and government improvements provided by the National Park Service to the concessioner. Compliance with the plans is mandatory. Financial functions associated with issuing and managing concession contracts include economic feasibility studies and ensuring a fair return to the government. General standards are set for calculation of financial returns to the United States and affirm that revenue production is subordinate to resource protection and visitor services.

### Commercial Use Authorizations

Commercial use authorizations (CUAs) may be used to authorize suitable commercial services to park unit visitors under certain limited circumstances. These authorizations may be issued only for services that are determined to be an appropriate use of the park unit, will have minimal impact on park resources and values, and are consistent with the purpose for which the unit was established, as well as being consistent with all applicable management plans, policies, and regulations. Commercial use authorizations must also

provide for the payment to the National Park Service of a reasonable fee to be used, at a minimum, to recover associated management and administrative costs (NPS *Management Policies 2006*). A concession contract instead of a commercial use authorization may be awarded (under 36 CFR Part 51) if it is determined that the proposed services are necessary and appropriate for public use and enjoyment of the park unit and that the more extensive requirements of a concession contract are necessary in light of the scope and nature of the services to be provided.

Pursuant to Section 418 of Public Law 105-391, NPS superintendents have been granted the authority to issue commercial use authorizations under interim guidelines pending the issuance of a proposed revised regulation. The interim guidelines allow commercial use authorizations to be issued instead of concession contracts under the following two circumstances:

*“In-park services”* — These services originate and are provided solely within the boundaries of a park and do not have annual gross receipts of more than \$25,000.

*“Out-of-park services”* — These services originate and end outside park boundaries, and the use of park area resources is incidental to the services. There is no cap on the amount of annual gross receipts for commercial use authorizations that originate outside the park. A CUA of this type may not authorize solicitation of customers, sales, or payment for commercial services to take place within the park; all of these activities must occur outside of the park area.

To protect park resources and values, park superintendents can limit the number of commercial use authorizations by a variety of means — limiting the number of commercial operators and limiting use of all types by time period, area, number of trips, user days, party size, etc. If a decision is made to limit the

number of commercial use authorizations, the superintendent will provide all applicants with a fair opportunity to obtain the available authorizations by a competitive process to select the most qualified applicant(s). Superintendents may include special terms and conditions in commercial use authorizations to ensure that services are provided to visitors at reasonable rates and under appropriate operating conditions.

The term of a commercial use authorization may not exceed two years, and no preferential right of renewal or similar provisions for renewal may be provided. A commercial use authorization may not authorize construction of structures, fixtures, or improvements within a park. However, a commercial use authorization may provide for the use of NPS buildings when necessary to assist in providing the authorized commercial services.

Commercial tours meeting the requirements of the interim guidelines will be authorized by commercial use authorizations using established tour fee schedules. No limitations on the number of commercial tour commercial use authorizations are allowed unless limitations are supported by other approved processes and policies. Nonprofit institutions are not required to obtain a commercial use authorization unless the authorized use generates taxable income.

Monitoring of all commercial activities is essential to ensure that business operations are conducted in a safe, fair, and reputable manner consistent with the mission of the park unit. Monitoring is also essential to ensure compliance with resource protection conditions stated in the authorization. Where user capacities exist in parks to manage use, monitoring is used to ensure compliance.

The National Park Service is authorized by the Cost Recovery Act to collect all costs associated with commercial use authorizations including application, administrative, and monitoring costs. Application and admini-

strative costs can be determined using average costs derived from historic records, but monitoring costs must reflect actual itemized costs.

### **Special Use Permits**

Special events may be authorized under permit by the superintendent subject to the same criteria as other special uses provided there is a meaningful association between the purpose of the park unit and the event and that the event contributes to visitor understanding of the significance of the park unit.

A superintendent may approve a request for a special event if it is determined that it

- will not conflict with law or policy,
- will not be a derogation of the values and purposes for which the park unit was established,
- is consistent with the park unit's enabling legislation,
- does not have reasonable potential to cause illness, personal injury, or property damage, and
- will not unduly interfere with normal NPS operations, resource protection, or visitor use.

The National Park Service will not permit the staging of special events that are conducted primarily for the material or financial benefit of participants or that involve commercialization, advertising, or publicity by participants. Unless the event is directly related to the purposes for which the park unit was established, it will also not be permitted if a separate public admission fee is charged. In addition, the Park Service will not sponsor or issue permits for special events conducted in wilderness areas if those events might be inconsistent with the protection of wilderness resources and values.

The Park Service will recover costs incurred in administering special use permits and monitoring the activities authorized under

such permits. The Park Service will also establish and collect permit fees authorized by applicable legislation, regulations, and policies.

Special use permits are not covered by the new NPS concession legislation. Separate regulations for the management of special use permits can be found in 36 CFR 1.6. Guidelines for the issuance of special use permits are provided by Director's Order 53 "Special Park Uses." The guidelines include NPS policy and instructions regarding commercial filming and photography, special events, rights-of-way, and use and occupancy permits.

### Commercial Film Permits

It is NPS policy to allow commercial filming and photography when it is consistent with the protection and public enjoyment of park unit resources. The regulations used to manage commercial filming are contained in 36 CFR 5.5. The Park Service has the authority and responsibility to manage, permit, and/or deny filming projects consistent with the following principles:

- Natural, cultural, wilderness, and recreational resources will be protected.

- Activity will not unduly conflict with the public's normal use and enjoyment of a park.
- Visitors using cameras and /or recording devices for their own personal use are generally exempt from film permit requirements.
- Coverage of breaking news never requires a permit, but it is subject to the imposition of restrictions and conditions necessary to protect park resources and public health and safety and to prevent derogation of park values.
- The Park Service will not censor the content of any project, nor require finished film products for review, files, or documentation purposes.

Commercial filming programs in parks are usually managed as a special park use with full cost recovery. Applicants reimburse the park for all costs related to meetings, location scouting, development of permit stipulations, and on-site monitoring of film projects. Each film project usually has a unique set of conditions developed to ensure that park resources are protected and that filming activities do not impact other park visitors.

## PURPOSE AND SIGNIFICANCE STATEMENTS AND MISSION GOALS

### PURPOSE

Purpose statements are derived from the park unit's authorizing legislation and reaffirm the reasons for which the area was established as a unit of the national park system. Purpose statements provide the foundation for all decisions regarding the management and use of the park unit.

Cape Lookout National Seashore was established by Public Law 89-366 (March 10, 1966) "to preserve for public use and enjoyment an area in the State of North Carolina possessing outstanding natural and recreational values . . ." From this legislation, the national seashore's purpose has been further broadened:

[T]o conserve and preserve for public use and enjoyment the outstanding natural, cultural, and recreational values of a dynamic coastal barrier island environment for future generations. The national seashore also serves as both a refuge for wildlife and a recreational area for the public, including developed visitor amenities.

### SIGNIFICANCE

Significance statements describe the distinguishing resources and characteristics that set a park unit apart in a regional, national, and sometimes international context. These statements assist managers with making decisions that preserve the resources and values necessary to accomplish the national seashore's purpose.

- The national seashore has been designated a unit of the Carolinian–South Atlantic Biosphere Reserve by the United Nation's Educational, Scientific and Cultural Organization. It is also designated a North Carolina Natural Heritage Area.
  - The barrier islands provide refuge and critical habitat for threatened and endangered species such as the loggerhead sea turtle, piping plover, and seabeach amaranth (a plant species). Critical habitat is also provided for other unique wildlife including the protected wild horses of Shackleford Banks. More than 275 bird species use the national seashore for resting, nesting and feeding, and as a migratory stop-over point. The national seashore is designated a Globally Important Bird Area by the American Bird Conservancy.
  - The national seashore's significant cultural resources reflect the rich maritime history of the Outer Banks. The Cape Lookout Village Historic District and the Portsmouth Village Historic District are distinguished by listing in the National Register of Historic Places. A diverse array of structures dot the cultural landscapes of these districts — the Cape Lookout Lighthouse and Keepers' Quarters, fishing cottages, U.S. Life-Saving Service and Coast Guard facilities, and various community buildings (Portsmouth's church, school, and post office / general store).
  - The national seashore provides outstanding opportunities for visitors to fish, hunt, beach comb, hike, swim, and camp in a remote coastal environment.
- The national seashore's 56-mile-long coastal barrier islands are among the most dynamic in the United States. The combined natural forces of wind, waves, and tidal currents continually reshape the low-lying islands.

## MISSION GOALS

Mission goals express the ongoing and desired future conditions that the park unit strives to achieve.

The mission of Cape Lookout National Seashore is to

- conserve and preserve for the future the outstanding natural resources of a dynamic coastal barrier island system,
- protect and interpret the significant cultural resources of past and contemporary maritime history,
- provide for public education and enrichment through proactive interpretation and scientific study, and
- provide for sustainable use of recreational resources and opportunities.

## RELATIONSHIP TO OTHER PROJECTS AND PLANS

The following plans, policies, and actions could affect the alternatives being considered in this environmental assessment. The actions proposed in this *Commercial Services Plan* should be in accord with ongoing and future plans for management of the national seashore. These plans and policies have been considered in the development of the alternatives, were used to provide background information for this plan, and were also considered in the analyses of cumulative impacts.

### GENERAL MANAGEMENT PLAN / DEVELOPMENT CONCEPT PLAN (1982)

The 1982 *General Management Plan* established the underlying NPS management philosophy and long-range planning direction for the national seashore. The following are among the management objectives identified:

- *Resources management:* The seashore will be maintained in a natural condition, with primary resource management consideration of the dynamic natural processes that shape its exposed, maritime setting and environment. Native wildlife (particularly threatened and endangered species) and historic resources will be preserved and protected.
- *Visitor use and interpretation:* Seashore resources and recreational pursuits will be made available and accessible to visitors in a manner that minimizes environmental impacts. The interpretive emphasis will focus primarily on the effects of the sea on the barrier islands.
- *Development:* Facilities will only be developed on the barrier islands that are essential to visitor use, safety, and resource management. Major facilities (visitor contact, administration, maintenance) will be developed at the mainland site on Harkers Island.

### GENERAL MANAGEMENT PLAN AMENDMENT / ENVIRONMENTAL ASSESSMENT (2001)

The *General Management Plan Amendment* addressed improvements to overnight accommodations and transportation services to North and South Core Banks. The Portsmouth Village area at the northern end of North Core Banks was excluded from provisions of the amendment.

The preferred plan alternative called for the national seashore to negotiate long-term contracts with concession operators to transport visitors and private vehicles from Davis and Atlantic, North Carolina, to the visitor use areas at Long Point and Great Island. Overnight visitor accommodations were to be improved by removing old cabins at Great Island and constructing 30 new cabins. Ten new cabins were to be constructed at Long Point. Incidental business permits were to be improved and issued every two years for small boat operators transporting visitors to the lighthouse area. The plan also called for a reduction in the number of parking spaces located near the 1873 Lighthouse Keepers' Quarters and elimination of the parking area near the Cape Lookout environmental education center.

### CAPE LOOKOUT NATIONAL SEASHORE VISITOR ORIENTATION AREA DEVELOPMENT CONCEPT PLAN / ENVIRONMENTAL ASSESSMENT (2005)

The plan analyzed alternatives for improved visitor use facilities near the Cape Lookout Lighthouse. The selected alternative was construction of a new comfort station and visitor contact station on a previously disturbed site outside the boundary (to the north) of the historic district. Additional

project actions included the placement of new water line, construction of a 75-car public parking area (also to the north of the historic district), and construction of new sections of boardwalk.

**CAPE LOOKOUT VILLAGE,  
CULTURAL LANDSCAPE REPORT  
(DRAFT 2005)**

The cultural landscape report provides detailed cultural landscape descriptions, analyses, and treatment recommendations for the Cape Lookout Village Historic District. The cultural landscape is identified as a contributing component of the district's national register significance, furthering the district's overall integrity of setting, feeling, and association.

**ECONOMIC FEASIBILITY STUDY OF  
POTENTIAL COMMERCIAL SERVICES  
AT CAPE LOOKOUT VILLAGE (2005)**

The consulting firm of Dornbusch Associates prepared this study to analyze the feasibility and necessary conditions for a prospective concessions operator to provide visitor services (e.g., lodging, food and beverage, and merchandise sales) using rehabilitated buildings at the central residential portion of the Cape Lookout Village Historic District. The study concluded that a single concessions operator could profitably lease at least eight of the structures in the district for visitor lodging if the concessions operation was combined with other fishing camp units in the South Core Banks.

**INTERIM PROTECTED SPECIES  
MANAGEMENT PLAN / ENVIRONMENTAL  
ASSESSMENT (2006)**

This plan was prepared to evaluate and implement strategies to avoid adversely impacting protected species while allowing for

appropriate recreational use. The plan (in conformance with the national seashore's enabling legislation, NPS policies, the Endangered Species Act, the Migratory Bird Treaty Act, and other relevant laws and mandates) will provide interim guidance pending the development of the long-term *Off-Road Vehicle Management Plan*.

**PROTECTION OF LIGHTHOUSE AND  
ASSOCIATED HISTORIC  
STRUCTURES (SPRING 2006)**

This project was completed to protect the Cape Lookout Lighthouse and associated structures from shoreline erosion occurring on the western (sound side) of the cape. The shoreline between the lighthouse area and the sound has substantially eroded since the mid-twentieth century and was heavily impacted by Hurricane Isabel in 2003 and subsequent storm surges. Sand dredged from a shoal northeast of Shackleford Banks was used to protect the lighthouse and associated historic structures.

**CAPE LOOKOUT VILLAGE HISTORIC  
STRUCTURES REUSE IMPLEMENTATION  
PLAN / ENVIRONMENTAL  
ASSESSMENT (DRAFT 2007)**

This plan analyzes alternatives for the treatment and adaptive use of historic buildings and structures in the Cape Lookout Village Historic District. The preferred alternative calls for the rehabilitation of selected structures for NPS use for administrative and interpretive purposes and by a concessions operator for public overnight lodging. Essential utilities would be constructed, including water and electrical lines and a central wastewater treatment system. Selective vegetation clearing would be undertaken within the district. Three historic structures would be relocated to their original site locations.

### **FEASIBILITY STUDY — COMMERCIAL SERVICES PLAN, CAPE LOOKOUT NATIONAL SEASHORE (DRAFT 2007)**

The consulting firm of Dornbusch Associates prepared this study to analyze the financial feasibility and economic impacts of the alternatives considered in this *Commercial Services Plan*. The study examined the feasibility of (1) passenger ferries to the Cape and Shackleford Banks from Harkers Island and Beaufort, (2) passenger and vehicle ferries to Long Point and Great Island, (3) vehicle tours of the seashore, (4) kayak rentals, (5) lodging, and (6) additional services that could be provided by the lodging concession operations.

The study concluded that, to the extent possible, commercial services should be grouped by geographic location to reduce unnecessary labor costs and limit visitor confusion resulting from multiple service providers. Grouping commercial services under fewer concession contracts would also facilitate national seashore management of service providers, and would benefit the national seashore by enabling the collection of franchise fees on revenues derived from all services.

### **PORTSMOUTH VILLAGE, CAPE LOOKOUT NATIONAL SEASHORE, CARTERET COUNTY, NORTH CAROLINA, CULTURAL LANDSCAPE REPORT (DRAFT 2007)**

The cultural landscape report provides detailed cultural landscape descriptions,

analyses, and treatment recommendations for the Portsmouth Village Historic District. Although lacking overall integrity from the 18th and 19th centuries, the surviving fabric of the historic district continues to convey the enduring connections between the siting of structures / buildings and natural features, the historic use of materials, and strong sense of community.

### **OFF-ROAD VEHICLE MANAGEMENT PLAN AND REGULATION (IN PROGRESS)**

An *Off-Road Vehicle (ORV) Management Plan* is being prepared to guide the management and control of off-road vehicles at Cape Lookout National Seashore. (Although ORV use is considered in this *Commercial Services Plan*, management of all off-road vehicles will be determined in the *Off-Road Vehicle Management Plan*.) The ORV plan will also form the basis for a special regulation that will regulate ORV use at the national seashore. The *ORV Management Plan* will assess potential environmental impacts associated with a range of reasonable alternatives for managing ORV impacts on national seashore resources such as threatened and endangered species, soils, wetlands, wildlife, soundscapes, and cultural resources. Socioeconomic impacts and effects on visitor experience and public safety will also be analyzed in that document.

## PLANNING ISSUES AND CONSIDERATIONS

### PLANNING ISSUES

The planning team conducted both internal scoping with NPS national seashore and regional personnel and external scoping with the public, other agencies, and stakeholders to identify the broad range of issues bearing on commercial services at the national seashore. The following primary issues and considerations were identified through scoping and were considered in the development of planning alternatives:

- What is the appropriate level of service to address visitor user capacity and resource protection objectives? Large numbers of visitors disembark at specific locations on the islands, which places increasing stress on national seashore resources and facilities (sanitation systems, food and water availability, etc.)
- What is the appropriate range of visitor experiences?
- Are commercial use authorizations or contracts the most effective means of providing the best and safest visitor services at a reasonable cost?
- What is the appropriate level and management of beach tour concession operations?
- Because ferries currently leave from different private locations on the mainland, how can the national seashore ensure that visitors receive a standardized orientation to the national seashore or trip preparation and logistics information?
- What are the demands, needs, and opportunities for rental of one or more NPS facilities for organized group use?
- What options (e.g., short-term leasing) are feasible to provide facility rentals to non-profit groups and others that will generate revenue for the national seashore?
- How can large visitor groups, such as school groups, be better accommodated?
- What are the appropriate and best uses for structures such as the former gun club?
- What actions should the Park Service take to provide handicapped accessibility in all appropriate areas?
- What criteria for functions and facilities should be adopted for ferry access points on the mainland and at the seashore?
- How can the national seashore respond to escalating regional property values that could influence the location and development of ferry access points on the mainland?

### PLANNING CONSIDERATIONS

- Current concession contracts and commercial use authorizations at Cape Lookout National Seashore are up for renewal and reauthorization. The *Commercial Services Plan / Environmental Assessment* identifies the necessary and appropriate commercial services for the national seashore and evaluates the options to best manage these services.
- A moratorium on commercial use authorizations (formerly incidental business permits) for additional ferry service has been in place for several years. The moratorium will remain in place until this *Commercial Services Plan* is completed.
- This *Commercial Services Plan* should be coordinated with the *Cape Lookout Village Historic Structures Reuse Implementation Plan* for the Cape Lookout Village Historic District.
- This *Commercial Services Plan* should be in conformance with the broader long-term objectives articulated in the national seashore's purpose, significance, and mission statements.
- Selecting and limiting commercial use authorizations and concession operations may intensify competition among

operators. According to PL 105-391 and 36 CFR Part 51, businesses should compete on an equal basis.

- The seashore has unoccupied, unleased buildings on the islands, and there is increasing demand that they be made available for use. Depending on logistical considerations, these properties could be used by groups and organizations for meetings, retreats, and other functions on a day-use or longer-term basis.
- The Park Service has received requests from private organizations for exclusive assignment of structures in the national seashore (such as the gun club) on a long-term basis. Some structures might be used only sporadically, and other organizations might desire the use of the structure on an ongoing basis. The National Park Service will analyze the implications of an exclusive assignment of resources to one organization. The National Park Service will also consider if the cost of upgrading and maintaining such structures is justified.
- Any proposed occupancy or adaptive use of historic buildings would require an NPS assessment to ensure that historic character-defining features are protected and preserved in accordance with applicable policies and guidelines (e.g., *The Secretary of the Interior's Standards for Rehabilitation*).
- Buildings and facilities proposed for public use and occupancy must meet federal and state requirements for public health and safety.
- A study would be needed to analyze the feasibility of the alternatives before completing the *Commercial Services Plan*.

## PUBLIC COMMENTS

Comments from the public early on, during the scoping process for this *Commercial*

*Services Plan*, were as follows. These comments helped the planning team form the alternatives.

- Retain the national seashore's natural, undeveloped nature.
- Continue to provide opportunities to experience the tranquility and remoteness of the barrier islands.
- Limit commercial operations to essential services or what is necessary for visitor safety (drinking water, appropriate beach transportation, etc.).
- Provide a small store to supply visitor convenience items (food items, sunscreen, etc.).
- Increase visitor access and expand options for exploring the islands by renting kayaks and land vehicles (e.g., golf carts, ATVs).
- Provide more ferry and tour boat docks to help resolve use conflicts among boat operators.
- Expand and improve interpretive activities and tours, including tours of the lighthouse and Cape Lookout Village Historic District and Portsmouth Village Historic District.
- Open the former gun club for visitor use opportunities such as environmental education, special events, hunting camp, etc.
- Provide public ferry service from the park headquarters boat basin on Harkers Island, and consider other appropriate departure / docking locations.
- Explore ways to accommodate larger visitor group activities at particular locations, and provide organized group activities.
- Improve the interpretation / orientation offered to ferry passengers.

## IMPACT TOPICS

### DERIVATION OF IMPACT TOPICS

Impact topics are the resources or subjects of concern that could be affected by actions discussed in the range of alternatives. These impact topics were identified from federal laws and regulations, issues that were brought up by the public, and NPS knowledge of limited or easily impacted resources. A brief rationale for the selection of each impact topic is provided below, as well as the rationale for dismissing specific impact topics from further consideration.

### IMPACT TOPICS ANALYZED IN THIS DOCUMENT

#### Visitor Use and Experience

Providing for quality visitor experiences and interpretation are among the fundamental purposes of the National Park Service. The public responses received during scoping for this *Commercial Services Plan* reflect a broad range of desired experiences (e.g., retain the seashore's natural, undeveloped character, offer convenience items for purchase on the islands, provide kayak and low-impact vehicle rentals, improve interpretive activities and group tours). Taking these comments into consideration, the alternatives evaluated in this *Commercial Services Plan* would affect visitor access to the national seashore and the types and levels of recreational and educational opportunities that would be available. The impacts on visitor use and experience are therefore analyzed in this environmental assessment.

#### Cultural Resources

The 1966 National Historic Preservation Act (16 USC 470 *et seq.*), the 1916 NPS Organic Act, NPS Director's Order 28 ("Cultural

Resource Management Guideline"), and other NPS planning and cultural resource policies and guidelines call for the consideration and protection of historic properties in development proposals. The evaluation of potential impacts of proposed actions on significant historic properties is required by the National Historic Preservation Act and the National Environmental Policy Act, as is attention to the provisions of the Native American Graves Protection and Repatriation Act for sites where human remains or burials may be present.

**Historic Structures, Buildings and Cultural Landscapes.** The structures and buildings comprising the Cape Lookout Village Historic District and Portsmouth Village Historic District could be affected by actions proposed by this *Commercial Services Plan* regarding visitor use opportunities at these locations. Analysis of the effects specifically associated with stabilization and rehabilitation of historic structures at the Cape Lookout Village Historic District was presented in the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007). That plan's preferred alternative calls for selected historic structures to be rehabilitated for overnight visitor lodging under a concessions operation. Similar options for overnight visitor accommodations may be considered at Portsmouth Village. Because rehabilitation and adaptive use of historic structures at these locations could affect building fabric and other character-defining features of these properties, the impacts on historic buildings and structures are analyzed in this environmental assessment.

The cultural landscapes contributing to the significance of the Cape Lookout Village Historic District and Portsmouth Village Historic District could also be affected by actions proposed in this plan and expanded visitor use opportunities. According to the National Park Service's *Cultural Resource*

*Management Guideline* (DO-28), a cultural landscape is defined as the following:

[A] reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

Potential new or improved facilities, infrastructure, and access to the historic districts could alter patterns of circulation, historic views, and other elements contributing to the significance of cultural landscapes at the national seashore. Therefore, the impacts on cultural landscapes by actions proposed in this plan under the various alternatives are evaluated and analyzed in this environmental assessment.

### Natural Resources

**Wildlife.** A wide variety of species are supported by the diverse habitats at Cape Lookout National Seashore. Birds are the most numerous inhabitants, with more than 275 identified species that use the national seashore for resting, nesting and feeding, and as a wintering or migratory rest stop. Other native species include marsh rice rats, river otters, and the eastern and least shrew as well as several species of amphibians and reptiles. Some actions proposed in this plan would help to disperse visitors across a larger area of the national seashore, which could impact wildlife habitat or increase disturbance during important life activities. For this reason impacts on wildlife are analyzed in this plan.

### Socioeconomic Environment

Increasing visitation to the national seashore, and the accompanying types and levels of commercial services to accommodate visitor use and access, have broad implications for local community economies and Carteret County. Tourism accounts for a substantial financial contribution to the county's economy, particularly during the summer visitation period. Socioeconomics is therefore analyzed as an impact topic in this document.

### NPS Operations and Facilities

The alternatives proposed in this plan could affect NPS operations and facility management for the national seashore. Potential revisions to the permitting and contractual arrangements under which commercial services are authorized at the seashore could affect how the seashore administers these services and collects revenues. Facility improvements or new construction to enhance visitor use would contribute to the seashore's operating costs and the requirements for the facility management staff to construct and/or provide ongoing maintenance of these facilities. The plan may also impact ranger operations in both law enforcement and interpretation. Because these actions would have long-term implications for the seashore's administrative and facilities management operations and budget, the impacts on national seashore operations are analyzed in this plan.

### IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

#### Cultural Resources

**Archeological Resources.** The Outer Banks region is thought to have been first occupied at least 3,000 years ago by small groups of semi-nomadic people who subsisted by hunting, fishing, and gathering. Little is known of these early inhabitants, and archeological

evidence of their occupation has been largely lost or disturbed as a result of storms and the dynamic geomorphology of the barrier islands. These factors have substantially compromised the stratigraphy of identified sites and have likely eroded other sites away. NPS archeological investigations conducted in the mid-1970s identified 10 prehistoric sites, typically found eroding from sand dunes, beach wash, or along the edges of salt marshes. Light to moderate accumulations of cultural material were identified, for the most part consisting of the remnants of shell middens, nondiagnostic ceramics, and tool fragments. All of the sites were evaluated as lacking scientific and cultural significance and were therefore recommended ineligible for listing in the national register.

Historic archeological resources have also been identified within the national seashore associated in part with the limited occupation of the Outer Banks during the Colonial period; use of Cape Lookout Bight as a protected harbor for ships seeking refuge during storms; fishing and whaling settlements; military operations associated with the Revolutionary War, the War of 1812, the Civil War, and World Wars I and II; development of the Cape Lookout lighthouse and life-saving stations; and historical occupation of areas of Cape Lookout Village Historic District and Portsmouth Village Historic District. These resources (e.g., former building sites and foundations, refuse dumps, gun emplacements, etc.) have similarly been subject to the damaging effects of storms, the movement of the barrier island landforms, and subsequent human activities and disturbance. Other unknown archeological resources may exist.

Limited new NPS-approved construction may occur at existing visitor use locations on the barrier islands and at existing or new locations on the mainland in support of commercial services operations. In consultation with the North Carolina state historic preservation officer, the National Park Service would assess and conduct, as necessary, archeological

surveys of all areas where ground disturbance is anticipated. In the unlikely event that identified archeological sites could not be avoided, any necessary mitigation would be carried out in further consultation with the state historic preservation officer. Should archeological resources be discovered once construction is underway, the National Park Service would ensure that measures are taken to evaluate resource significance, and undertake site avoidance or data recovery measures (see the “Mitigation Measures” section in chapter 2 of this document). Because it is unlikely that any known archeological resources either listed or eligible for listing on the national register would be affected by proposed project actions, archeological resources have been dismissed as an impact topic in this environmental assessment.

**Ethnographic Resources.** Ethnographic resources are defined by the National Park Service as any “site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it (Director’s Order 28, Appendix A, pg. 181). No known ethnographic resources are identified within the Cape Lookout area. There are no recognized Native American tribal groups with cultural affiliation to the national seashore. Therefore, ethnographic resources are dismissed as an impact topic in this environmental assessment.

**Museum Collections.** Cape Lookout National Seashore’s museum collections number approximately 4,000 objects, including archeological artifacts, historical objects, archival materials, and historic furnishings. As part of the long-range planning effort for management of the historic residences within the Cape Lookout Village Historic District, the National Park Service envisions that historic furnishings and other decorative / utilitarian items representative of the district’s period of significance (ca. 1857 to 1950) would be placed within selected buildings to

assist in interpreting the lifeways and living arrangements of former cape residents. Within buildings open to the public at Portsmouth Village (such as the post office / general store), the Friends of Portsmouth Island have assisted with the exhibit of items representative of those historically available to former residents.

Further collections management studies and exhibit planning may be required to guide these and related efforts. No sensitive items are anticipated to be placed within the buildings that would require special security measures or environmental control systems. Because no specific or detailed treatment actions are proposed at the present time addressing historic furnishings and museum collections, and additional implementation planning may be required to guide interior exhibits, museum collections is dismissed as an impact topic in this environmental assessment.

**Indian Trust Resources.** Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources in Cape Lookout National Seashore. The lands comprising the national seashore are not held in trust by the secretary of the interior for the benefit of Indians due to their status as Indians; therefore, the impact topic of Indian trust resources is dismissed in this environmental assessment.

## Natural Resources

**Air Quality.** Protection of air quality in national park system units is required by NPS management policies and the Clean Air Act as amended. The National Park Service will “seek to perpetuate the best possible air quality in parks to (1) preserve natural resources and systems; (2) preserve cultural resources; and (3) sustain visitor enjoyment, human health, and scenic vistas” (4.7.1). The national seashore has been designated a class II airshed for the prevention of significant deterioration of air quality.

Even though it appears that most air pollutants are dispersed by the maritime winds, the National Park Service believes that industrial pollutants are lowering pH values of freshwater bodies in the Southeastern United States. The effects of acid rain on freshwater ponds, vegetation, and historic resources at the national seashore are unknown and are not being monitored.

Commercial tour, ferry and private boats, and motorized ground transportation vehicles are the most likely sources of localized air pollutants at Cape Lookout. The number of boats and other vehicles are not expected to substantially increase as a result of implementation of this plan.

There could be adverse impacts to air quality from vehicle emissions or dust resulting from work on existing or proposed facilities. Best management practices would be used to control dust during facility development and maintenance activities.

All the impacts just described would likely be short term and localized and not likely to appreciably affect overall visibility or air quality at the national seashore. Therefore the impacts on air quality from implementation of this plan would be negligible in both the short and the long-term. Because only negligible impacts in air quality at the national seashore

are anticipated as a result of this plan, air quality has been dismissed as an impact topic.

**Geologic Resources.** Consideration of geologic resources, including both geologic features and geologic processes, is required by NPS management policies. In general, the Park Service will allow geologic processes to continue unimpeded. Specifically, with respect to shorelines and barrier islands, the Park Service will also allow natural shoreline processes (e.g., erosion, deposition, dune formation, overwash, inlet formation, and shoreline migration) to continue without interference (NPS *Management Policies 2006*, 4.8.1.1).

Like the rest of the Outer Banks, Core Banks was formed by sand deposition. The Core Banks are underlain entirely by sand and unconsolidated materials deposited by wind and water. The forces that modify the island topography include wind, water, and storms. The overwash from storms and hurricanes brings sand from the ocean-side beach across to the sound side of the islands. Over time, the wetland soils from the sound side become part of the beach on the ocean side. Sometimes these changes occur almost imperceptibly, and at other times, such as during storms, the change is quite dramatic.

Some actions proposed in this plan could have an impact on shoreline processes at the national seashore. Under alternatives B and C the Park Service would, as necessary, develop additional structures to provide commercial service providers with equipment storage space (e.g., kayaks, or low-impact vehicles). These storage structures would be built near existing development, in areas previously disturbed if possible, and set back from the water line. These structures would be designed to minimize interference with water flow across the island during storms and other natural processes. If visitation substantially increased, the Park Service could consider development of additional docks at existing activity centers (e.g., Cape Lookout).

The location and type of any facility that would be constructed would be determined based on the array of commercial services offered at individual activity points when this *Commercial Services Plan* is completed. Any adverse impacts associated with development of support facilities for commercial services would be negligible to minor in the long term because the impacts would be localized and not likely to exceed the level of disturbance normally experienced on the island as a result of wind, wave, or storm action. Before these actions are completed site-level planning and environmental compliance would be completed as appropriate.

Under alternatives B and C there could also be an increase in the number of low-impact vehicles) vehicles at the national seashore. Visitors could participate in tours (alternatives B and C) or venture out on their own (alternative C) subject to existing rules and regulations. All ORV use at the national seashore, including commercial visitor service providers, would be managed under this plan and the accompanying regulation. Management of ORV use at the national seashore will be consistent with Executive Order 11644 which states that “[a]reas and trails shall be located in the National Park System . . . only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.” For this reason the impacts on shoreline processes from ORV use associated with commercial use have not been analyzed in this *Commercial Services Plan*. (For additional information about the *Off-Road Vehicle Management Plan* please see p 17)

In summary, the potential impacts to geologic resources from implementation of the *Commercial Services Plan* will be negligible to minor in the short and long term. For this reason geologic resources will not be further analyzed in this plan.

**Soils.** Soil resources are managed according to NPS *Management Policies 2006* (4.8.2.4). Soils for the entire national seashore are mapped and discussed in detail in the *Soil Survey of the Outer Banks, North Carolina* (USDA, SCS, 1977). The soils are characterized as having poor load-bearing capacity, instability due to wind and water activity, and high water tables. Soils on the islands could have severe limitations for development. Under the action alternatives, some limited, new development could occur to support appropriate commercial services at the national seashore. This development would be designed to minimize disruption of natural coastal processes (see discussion of geologic processes) and soil disturbance. Before any development, site-level planning and environmental compliance would be completed as appropriate. With appropriate site-specific mitigation, the impacts on soils from implementation of this plan would be negligible to minor. For this reason soils have been dismissed as an impact topic for this plan.

**Prime and Unique Farmlands.** The 1981 Farmland Protection Policy Act (PL 97-98) was passed to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. Provisions of the act also ensure that federal programs are administered in a manner that (to the extent practicable) is compatible with the farmland protection programs and policies of state and local governments and private entities.

The National Park Service consulted with the Department of Agriculture's Natural Resource Conservation Service, the agency responsible for implementation of the policy. The Natural Resource Conservation Service stated that there are no prime or unique farmlands located within the Cape Lookout National Seashore. Therefore, prime and unique farmland was dismissed as an impact topic.

**Wetlands.** All wetlands in national park system units are protected and managed in

accordance with Executive Order 11990 ("Protection of Wetlands"), NPS Director's Order 77-1 and its accompanying procedural handbook, and NPS *Management Policies 2006* (4.6.5). This guidance requires the National Park Service to protect and enhance natural wetland values and examine the impacts on wetlands. It is NPS policy to avoid affecting wetlands and to minimize impacts when they are unavoidable. NPS Procedural Manual 77-1 ("Wetlands Protection") describes NPS policies and procedures for protection of wetlands in park units. It is NPS policy to prepare a "Statement of Findings" when a proposed action has the potential to adversely affect wetlands.

There are two types of designated wetlands at the national seashore, and both occur in the sound. High salt marshes are flooded in spring and during storm tides. The dominant vegetation type is black needlerush (*Juncus roemerianus*) and saltmeadow cordgrass (*Spartina patens*). Low salt marshes are flooded daily at mean low tide. Typically, the predominant vegetation is composed of dense stands of salt marsh cordgrass (*Spartina alterniflora*). Spike grass (*Salicornia*, *Distichlis spicata*) and sea lavender (*Limonium carolinianum*) are also present. Salt marshes depend on cyclic inundation to accumulate peat, sediments and nutrients. Tidal action also prevents the invasion of upland species and therefore maintains monotypic stands of cordgrass.

None of the current activity centers at the national seashore are located within a designated wetland. Some of the actions proposed in the action alternatives could impact the shoreline within the sound, which could impact nearby wetlands. These actions could, for example, include development of an additional dock near the lighthouse at Cape Lookout or other activity center to accommodate future increases in ferry traffic because of an appreciable increase in visitation. Consistent with NPS policy, any new development in the sound would be designed to avoid wetlands where possible and to

minimize impacts when they are unavoidable. Should such development be proposed, a detailed analysis of potential impacts to wetlands from development in the sound would be conducted during site-specific planning and design processes. Environmental compliance activities would be conducted, as appropriate, including the preparation of a “Statement of Findings.” With mitigation measures identified during the planning and design process, the long-term adverse impacts on wetlands would be negligible; for this reason wetlands have been dismissed as an impact topic under this plan.

**Floodplains.** Floodplains in national park system units are protected and managed in accordance with Executive Order 11988 (“Floodplain Management”), NPS Director’s Order 77-2 (“Floodplain Management”), and NPS *Management Policies 2006* (4.6.4). This guidance requires the National Park Service to protect, preserve, and restore floodplain values; minimize risk to life or property by design or modification of actions in floodplains; and examine impacts on floodplains. It is NPS policy to avoid affecting floodplains and to minimize impacts when they are unavoidable.

Natural floodplain values, as defined in the procedural manual for Director’s Order 77-2, are the attributes of the floodplain that contribute to ecosystem quality, including soils, vegetation, wildlife habitat, dissipation of flood energy, sedimentation processes, and ground water recharge. Periodic disturbance of natural floodplain soils by floods also contributes to ecosystem quality. The attributes that could be affected by implementing this plan include soils, vegetation, wildlife habitat, and sedimentation processes, including erosion. The impacts on soils, vegetation, and wildlife habitat are analyzed separately in this document. The floodplain values that are considered here are the ability of the floodplain to convey flood waters as well as changes to sedimentation processes that occur on the islands.

Except for the tops of the tallest dunes on Shackleford Banks and Cape Lookout Point, the lands in the seashore are within the 100-year floodplain and are within a coastal high-hazard area. The visitor center at Harkers Island is also within the 100-year floodplain. Consequently there is no practicable alternative to development in the floodplain. To minimize the risks to property on the islands, development is located to minimize potential impacts from natural flood processes and storms and complies with state and local building codes relative to development in floodplains and coastal hazard areas. Where it is not possible to relocate structures to lessen potential impacts from flood or coastal hazards (e.g., the camps at Long Point and Great Island), the structures were developed consistent with applicable state and local building codes relative to development in floodplains and coastal hazard areas.

Under alternatives B and C, some actions are proposed that would require development in the floodplain. These actions include development of storage facilities for commercial operations and other structures that would support visitor services at the national seashore. The impacts associated with developing storage facilities at the national seashore were previously discussed in this section under “Geologic Processes,” and particularly shoreline processes. The same mitigation measures that would be used to minimize impacts on natural shoreline processes would be used to minimize impacts on floodplain values, specifically the ability to convey floodwaters during storms. There could be some adverse impacts to sedimentation processes associated with development, but the impacts would be localized and limited. The impact of the proposed actions on the national seashore and at Harkers Island would have a negligible impact on the ability of the floodplain to convey floodwater during storms. There could be localized changes to sedimentation processes during some storms, but the effect would be localized and negligible and would be unlikely to modify sedimentation processes

in the long term. For these reasons floodplains will not be analyzed further in this document.

**Soundscapes.** NPS *Management Policies 2006* (4.9) and Director's Order 47 ("Soundscape Preservation and Noise Management") recognize the importance of natural soundscapes as park resources. The natural soundscape is defined as the natural sounds in a park unit that exist in the absence of any human-produced or associated sounds. The policies and director's order call for the National Park Service to preserve, to the greatest extent possible, the natural soundscapes of parks, to restore degraded soundscapes to natural conditions whenever possible, and to protect natural soundscapes from degradation due to noise. "Noise" is defined as unwanted sound that interferes with an activity or disturbs the person hearing them. All human sound could be considered "noise" when compared to the natural soundscape. This does not, however, imply that all human sounds are inappropriate or unacceptable. The range of acceptable human-caused sounds is variable, and what is acceptable in the vicinity of a visitor center may be unacceptable in a campground or a backcountry area.

The natural soundscape of Cape Lookout National Seashore includes all of the naturally occurring sounds such as calling birds and the surf, as well as the quiet associated with still nights. As with all NPS resources, the opportunity to experience natural soundscapes is part of the visitor experience. The natural soundscape of the national seashore contributes to a positive visitor experience and is a direct or indirect component of why many people visit the national seashore.

Under alternatives B and C are proposed actions that could impact the natural soundscape of the seashore, particularly how visitors experience the natural sounds of the national seashore. Under both alternatives visitors would be able to disperse over a larger area of the national seashore on either vehicles used

to convey a large number of people, as part of an organized tour on low-impact vehicles under alternative B. Under alternative C low-impact vehicles could be rented for individuals or group tours to use at the national seashore. Once away from the activity centers visitors would be able to experience the natural soundscape of the seashore, which would be a long-term benefit for visitors. However these same vehicles would also have an adverse impact on some visitors who would be bothered by the sounds of a vehicle.

Not all vehicle use on the national seashore would be associated with commercial service operations. As noted previously, the impacts associated with the use of off-road vehicles (ORVs) including ATVs will be analyzed in detail in the *Off-Road Vehicle Management Plan*. In determining the appropriate levels of use for all off-road vehicles (both private vehicles and those associated with commercial services) the *Off-Road Vehicle Management Plan* will also consider in detail the impacts on natural soundscape. For this reason the impacts on natural soundscape from low-impact vehicle use as proposed under alternatives B and C will not be further analyzed in this document.

**Lightscaapes.** In accordance with NPS *Management Policies 2006* (4.10), the national seashore strives to preserve natural ambient lightscaapes, which are natural resources and values that exist in the absence of human-caused light. The Cape Lookout Lighthouse on South Core Banks is a source of unnatural light that cannot be shielded because of its function as an aid to navigation. Although the lighthouse does impact the darkness of the night sky, these impacts are not related to the actions of this plan. Other sources of artificial light at the national seashore include the camps at Great Island and Long Point and the proposed use of the historic structures in the Cape Lookout Village Historic Village. NPS policy currently limits the use of artificial outdoor lighting to that which is necessary for basic safety requirements, and all sources of

artificial light at the national seashore would be shielded to the maximum extent practicable. Visitors would receive information on the responsible use of artificial lights to minimize the potential adverse impacts on wildlife, such as sea turtles. None of the actions proposed in this plan would increase the presence of artificial light at the national seashore or its management. For these reasons, this topic is not evaluated further in this plan.

**Wilderness.** There is no federally designated wilderness on Cape Lookout National Seashore at the current time, although Shackleford Banks is identified as a proposed wilderness zone. Although wilderness is experienced differently by each person, some characteristics used to describe wilderness include “outstanding opportunities for solitude or primitive and unconfined types of recreation” (*Management Policies* 2006, 6.2.11). The purpose of this plan is to establish a framework to manage appropriate commercial services at the national seashore. The commercial operations considered in this plan would continue to occur in current activity centers at the national seashore. No new actions are proposed that would impact wilderness characteristics at Shackleford Banks. For this reason impacts to wilderness will not be further analyzed in this plan.

**Fisheries and Aquatic Habitat.** The 1996 Magnuson-Stevens Act requires the protection, conservation, and enhancement of essential fish habitat. Essential fish habitat (EFH) is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 USC 1802 (10)). Essential fish habitat for red drum and shrimp occurs in the Cape Lookout area of the national seashore (NPS 2004b). Impacts to essential fish habitat associated with use of personal watercraft have been analyzed under the *Cape Lookout National Seashore Personal Watercraft Use Environmental Assessment* (NPS 2004b). The *Commercial Services Plan* for Cape Lookout National Seashore describes how commercial ferry service would

be managed at the national seashore relative to visitor services. Implementation of the plan would not change how ferry services to the national seashore operate in the water. Operation of commercial ferries would continue to be governed by existing state and federal regulations. NPS actions proposed under this plan would have no new impacts on essential fish habitat in the vicinity of the national seashore. The commercial ferry operations that transport visitors to Cape Lookout National Seashore comprise a very small fraction of the total boat traffic in the area. Implementation of the plan would not change the increment of boat traffic associated with the commercial ferry operations to the seashore. For these reasons, the potential impacts to essential fish habitat from actions proposed in this *Commercial Services Plan* have not been further analyzed in this document.

**Wildlife.** There is a wide variety of wildlife species at the national seashore. Those species that would be impacted by actions proposed in this plan were discussed in the “Impact Topics Analyzed in this Document” section.

There are 110–130 horses, which are protected and maintained according to an amendment of the national seashore’s enabling legislation (NPS 2004b). No actions proposed under this plan would impact the horses on Shackleford Banks or management of the herd; for this reason there will be no further analysis of the horses under this plan.

Hunting and fishing at the national seashore would continue to be governed by state regulations. No actions under this plan would change current management of these activities by individuals or guide services, and there would be no new impacts on target species under this plan. For this reason hunting and fishing will not be further analyzed under this plan.

**Threatened and Endangered Species and State Species of Special Concern.** The Endangered Species Act requires federal

agencies to ensure that their activities do not jeopardize the existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. Consultation with the U.S. Fish and Wildlife Service and North Carolina Department of Natural Resources identified a number of threatened or endangered species, and state species of concern.

Species considered threatened or endangered include the piping plover, several species of sea turtle, and seabeach amaranth, the only threatened plant species at the national seashore. ). The *Interim Protected Species Management Plan/Environmental Assessment (March 2006)* directs management of threatened and endangered species at Cape Lookout National Seashore. The management actions described in the *Interim Species Protection Plan* are designed to minimize the potential for adverse impacts to threatened and endangered species. None of the proposed actions in this *Commercial Services Plan* would have greater impacts on threatened and endangered species than the actions analyzed under the *Interim Protected Species Management Plan* nor would the actions proposed alternatives of this *Commercial Services Plan* change the way protected species are managed. For this reason, threatened and endangered species are not analyzed further in this environmental assessment.

## Vegetation.

### Submerged Aquatic Vegetation —

Submerged aquatic vegetation beds are considered special aquatic sites (40 CFR 230 sec. 404(b) (1) *Guidelines – Protection of Wetlands and other Waters of the U.S.*). Submerged aquatic vegetation beds at Cape Lookout National Seashore are composed of several species of seagrasses. These species help to stabilize bottom sediments and improve water clarity by trapping fine particles that could otherwise remain suspended by wave and current action. The seagrasses bind shallow water

sediments with their roots and rhizomes and baffle wave and current energy with their leafy canopy. The physical stability, reduced mixing, and shelter provided by seagrasses make it a highly productive system. The seagrass beds are in protected shallow waters. Mapping completed by the National Oceanic and Atmospheric Administration identified 980 acres of seagrass beds at Shackleford Banks, 1,100 acres at South Core Banks, and 130 acres at North Core Banks (NPS 2004b).

Actions at the national seashore that could impact submerged aquatic vegetation include use of personal watercraft (PWC), private boats, and commercial ferries. Potential adverse impacts include increased turbidity, propeller scarring, and sediment alteration. Private and commercial boat operators and personal watercraft users must adhere to the rules and regulations established by the North Carolina Wildlife Resource Commission while at the national seashore and in surrounding waters. Personal watercraft may be landed at designated locations on the sound-side beaches of North Core Banks, South Core Banks, and Shackleford Banks; all riding must occur outside of the national seashore boundaries (NPS 2004b). Boat docks and anchorages at the national seashore are available for use by private boaters and ferry operators subject to established regulations. This *Commercial Services Plan* would not change the use of private boats, commercial ferries, or personal watercraft at the national seashore. The impacts associated with personal watercraft in the Core Sound on submerged aquatic vegetation were analyzed under the *Cape Lookout National Seashore Personal Watercraft Use Environmental Assessment*. There are no actions proposed in this plan that would have new impacts on submerged aquatic vegetation at the national seashore. For this reason impacts to submerged aquatic vegetation

will not be analyzed further in this document.

**Terrestrial Vegetation** — Vegetation communities arise in response to a combination of locally present conditions such as elevation, aspect, available water, and exposure to saltwater and wind. A slight change in elevation or localized protection from oceanic overwash can directly affect vegetative composition. Vegetation on the national seashore is divided into a series of distinct ecological zones defined by elevation and degree of exposure to the wind and water. The ecological zones are beaches, berms, tidal flats, dunes, open grasslands, closed grasslands, woodlands, high salt marshes, low salt marshes, and subtidal marine vegetation. The vegetation types grade into one another and often share common species. Not all vegetative communities are present in all areas.

The presence of vegetation can also affect the dynamics of depositional processes. For example, the cordgrass in the marsh area traps and holds fine particles of sand. Over time, this contributes to marsh formation. The roots of the grasses and other plants also help to hold sand particles in place. The grasses are particularly important in stabilizing the dunes.

Under alternatives B and C of this plan, visitors would have an opportunity to disperse over a larger area of the national seashore. Adverse impacts to vegetation at the national seashore could include direct disturbance by visitors (alternatives B and C) and driving off-road vehicles off established routes (alternative C). However because vehicles are confined to specific routes the adverse impacts to vegetation would be localized. Before departing from activity points, all visitors would receive orientation information regarding the fragile barrier island ecosystem. The purpose of this information would be, in

part, to encourage visitors to be stewards of the natural and cultural resources at the national seashore. In addition, the Park Service would increase natural and cultural resource monitoring under alternatives B and C; management actions could be taken to mitigate adverse impacts as appropriate. With these measures, the overall impact from implementation of this *Commercial Services Plan* on terrestrial vegetation would be negligible to minor. For this reason the impacts on terrestrial vegetation will not be analyzed further in this document.

**Aquatic Wildlife.** The national seashore supports a variety of habitats that are essential for the feeding, growth, and reproduction of marine animals including aquatic invertebrates, fish, and marine mammals. The *Commercial Services Plan* for Cape Lookout National Seashore describes how commercial ferry service would be managed at the national seashore with respect to visitor services. Implementation of the plan would not change how ferry services to the national seashore operate in the water. Operation of commercial ferries would continue to be governed by existing state and federal regulations for commercial ferry transport. The NPS actions proposed under this plan would have no new impacts on aquatic wildlife from operation of commercial ferries. Under the action alternatives, the National Park Service could develop additional docks near existing docks if visitation increases and existing docks are no longer adequate. There could be short-term adverse impacts to aquatic wildlife during construction including but not limited to increased turbidity and other water quality impacts. The long-term adverse impacts would be no greater than for existing dock facilities at the national seashore. Mitigation measures to reduce these impacts would include but need not be limited to siting any new construction near existing development and timing construction activities to avoid reproductive activities to the extent practicable. Before developing any new docks, the

National Park Service would initiate site-specific planning and environmental compliance actions as appropriate. For these reasons the impacts to aquatic wildlife will not be further analyzed in this document.

**Hazardous Materials.** NPS public health and hazardous materials specialists conducted an environmental audit of the Cape Lookout Village Historic District (BHATE Environmental Engineers and Scientists 2004, pg. 25). During the investigation, it was discovered that fuel or oil had leaked into the ground in one of the detached garages / sheds in the central residential area. The source of the contamination may have been from a former parked vehicle or from a leaking fuel / oil container. Measures are in progress to remove or otherwise mitigate the contaminated soils. Impacts from the leak or spill would be long-term, adverse and negligible to minor.

The historic district's residences may contain lead paint and asbestos shingles or siding that could, in some circumstances, pose potential health risks. However, the national seashore staff would ensure that all historic properties proposed for occupancy, adaptive use, and interpretation are free of hazardous materials and meet accepted health and safety standards. Because NPS staff would implement appropriate mitigation measures in the event of a future fuel or oil spill, and would ensure that all potentially hazardous building materials are removed during rehabilitation of historic structures, the impacts from hazardous materials would be negligible and this topic will not be further analyzed in this plan.

### Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environ-

mental effects of their programs and policies on minorities and low-income populations and communities.

The Environmental Protection Agency's Office of Environmental Justice defines Environmental Justice as follows:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies."

Environmental Protection Agency,  
April 1998, "Final Guidance for  
Incorporating Environmental Justice  
Concerns in EPA's NEPA Compliance  
Analysis, April 1998."

As stated in this final guidance, the goal of this "fair treatment" is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

In responding to this executive order two questions are asked and answered as the major part of the analysis:

1. Does the potentially affected community include minority and/or low-income populations?
2. Are the environmental impacts likely to fall disproportionately on minority and/or low-income members of the community and/or tribal resources?

For the purpose of fulfilling Executive Order 12898 in the context of the National Environmental Policy Act, the alternatives addressed in this plan were assessed during the planning process (Bureau of Reclamation 2007b). Although there are minority and/or low-income populations and communities within the county and region, it was determined that none of the planning alternatives would result in disproportionately high direct or indirect adverse effects on these groups. The following information contributed to this conclusion:

- The actions proposed by the alternatives would not result in any identifiable human health effects. Therefore, there would be no direct or indirect adverse effects on human health within any minority or low-income population or community.
- The impacts on the natural and physical environment that would occur due to any of the alternatives would not disproportionately and adversely affect any minority or low-income population or community.
- The alternatives would not result in any identified effects that would be specific to any minority or low-income community.
- The planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Impacts on the socioeconomic environment resulting from either of the action alternatives would be beneficial. The impacts would occur mostly within the one-county region containing the national seashore and would be either short term or spread out over a number of years, thus mitigating their effects. Additionally, the impacts on the socioeconomic environment would not substantially alter the physical and social structure of nearby communities.

As a result of this information and analysis, environmental justice was dismissed as an impact topic for this plan and environmental assessment.

**CHAPTER 2:  
ALTERNATIVES,  
INCLUDING  
THE PREFERRED  
ALTERNATIVE**





## THE ALTERNATIVES

The following alternatives for managing commercial services reflect a range of visions for what services are necessary and appropriate at the national seashore and how these services can best be provided. The issues expressed by the public and NPS staff have helped guide the preparation of these alternatives.

### ALTERNATIVE A (NO ACTION)

The current scope and level of commercial services would continue without substantial modification. This alternative serves as the baseline for comparing the actions and associated impacts of the other alternatives. (See the Current Areas of Commercial Services map.)

#### Visitor Ferry Access

Vehicle and passenger ferries would continue to operate from Atlantic, North Carolina, to Long Point on North Core Banks, and from Davis, North Carolina, to Great Island on South Core Banks. Also departing from private docks on the mainland, other passenger-only ferries would operate from Ocracoke to Portsmouth Village (North Core Banks); from Harkers Island and Beaufort to Shackleford Banks and the Cape Lookout lighthouse area (South Core Banks); and from Morehead City to Shackleford Banks. There would continue to be no ferries transporting visitors between the barrier islands. Ferries would typically operate from March 15th to December 31st.

#### Land Transportation on the Islands

Vehicle access would remain available for private vehicles brought over mostly by commercial ferries. Concession-guided ATV

tours would continue to be provided at Portsmouth Village Historic District. Vehicle services out of the Long Point and Great Island concession lodging areas would continue on a limited reservation basis. Regularly scheduled vehicle transportation would be provided from the lighthouse area to the southern tip of Cape Lookout, and to other places on South Core Banks on a limited reservation basis. Visitors requesting land transportation services at Cape Lookout would continue to pay operators on the mainland before departure to the islands.

#### Other Commercial Services

Rustic overnight lodging would continue to be available at Long Point (20 cabins) and at Great Island (25 cabins). As proposed by the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007), all contributing structures at the Cape Lookout Village Historic District will be stabilized. Of these, selected structures would be used for overnight visitor stays under a concessions operation (see appendix A). Limited visitor supplies (e.g., water, ice, fuel, and insect repellent) would remain available at the lighthouse area and the Long Point and Great Island concession lodging areas. Limited commercial hunting and fishing guide services, environmental tours on Shackleford Banks, and chartered fishing and sailing excursions would continue to be offered. Concession operators on the mainland would continue to provide kayak rental and transport services. Structures and facilities on the islands adapted for large group activities would consist only of those near the Cape Lookout Village Historic District area that are used by nonprofit organizations for environmental education.

### **Commercial Service Locations at the National Seashore**

Existing NPS facilities supporting public use, commercial services, and NPS operations would remain at the Portsmouth Village Historic District, Long Point, Great Island, the lighthouse area and Cape Lookout Village Historic District, and Shackleford Banks.

### **Resource Protection**

Natural and cultural resource management would continue under existing NPS policies for research, inventory, monitoring, and treatment. Natural resource management would emphasize protection and rehabilitation of sensitive species and ecosystems, water resources, and other resources such as the natural soundscape. Cultural resource management would emphasize protection and preservation of national register-listed or -eligible properties such as the Cape Lookout Village Historic District and Portsmouth Village Historic District.

### **National Seashore Operations / Facilities**

Minimal new facility construction for commercial services would occur beyond what is currently planned or underway, such as the rehabilitation of structures in the Cape Lookout Village Historic District. All facilities and docks on the islands are owned by the Park Service, and the Park Service would continue to maintain the facilities and infrastructure to support current and projected visitor use. All visitor facilities would be made accessible in accordance with the Architectural Barriers Act Accessibility Standards (May 8, 2006). The Park Service would continue to provide dump stations at Portsmouth Village, the Long Point and Great Island lodging areas, and near the cape. The Park Service would continue to provide vehicle parking/storage lots at Long Point, Great Island, and the cape, as well as a visitor boat mooring area at Great

Island. A Web site would be developed to gather information from visitors about the level of service, and the commercial service providers would be required to have facilities that meet minimum standards relative to accessibility. The NPS dock by the Harkers Island Visitor Center would continue to be used for national seashore operations. Administrative management of commercial services at the national seashore would remain a shared duty (the equivalent of .5 full-time employee), and no maintenance, interpretation, or law enforcement staff would be specifically dedicated to assist with commercial services.

### **Interpretation / Education / Orientation**

The current scope of NPS visitor interpretive programs and activities would continue, including natural history programs and talks and scheduled tours of the lighthouse. Environmental education programs administered by nonprofit organizations would continue to be offered in the area of the Cape Lookout Village Historic District. Commercial service operators would provide limited advance orientation and interpretive information to visitors, but would not provide interpretive programs. There would continue to be minimal NPS presence at commercial ferry departure points and oversight of information provided to visitors by commercial operators.

### **ALTERNATIVE B, PREFERRED**

Under alternative B, the national seashore would improve the management and operation of commercial services while sustaining a rustic and mostly unstructured visitor experience and maintaining the natural, remote character of the national seashore. Ferry and land transportation services would be expanded to enhance visitor exploration throughout the national seashore, and visitors would have more opportunities for education about the national seashore and awareness of



# Current Areas of Commercial Services





the national seashore's resources. As necessary and appropriate, additional support facilities, services, and rentals would be provided at existing arrival locations. Current opportunities would remain for those seeking solitude and self-directed activities, and a diverse range of other facilitated activities would be provided that perhaps incorporate concession-guided services (e.g., special events, cultural demonstrations, kayak tours, nighttime hikes, and lighthouse and historic district tours).

### Visitor Ferry Access

Under one or more commercial services instruments, vehicle and passenger ferries would operate from locations at or near Atlantic, North Carolina, to Long Point on North Core Banks, and at or near Davis, North Carolina to Great Island on South Core Banks. Additionally, at least one passenger ferry would operate from private mainland docks on the following routes: from Ocracoke to Portsmouth Village (North Core Banks); from Harkers Island and Beaufort to Shackleford Banks and the Cape Lookout lighthouse area (South Core Banks); and from Morehead City to Shackleford Banks. An additional passenger ferry route could be authorized to shorten the travel time to Portsmouth Village from a Down East location. Ferries would typically operate from March 15th to December 31st, but service would be expanded to perhaps include extended summer hours of operation, more daily trips, and extended operations into off-season periods under a reservation system. Ferries capable of accommodating large groups (up to 150 passengers at a time) would also be brought into service as feasible. More consistent departure schedules would be established for all ferry services. Dock improvements at the Harkers Island Visitor Center boat basin would enable departures from this location for commercial ferry operators and provide private boaters with short-term moorage while going to the visitor

center. Visitor ferry transportation would be provided between the barrier islands on a reservation basis.

### Land Transportation on the Islands

Vehicle access would remain available for private vehicles brought over mostly by commercial ferries. Concession-guided low-impact vehicle tours would be provided at Portsmouth Village. Rental of low-impact vehicles for group tours would be provided at Long Point, Great Island, and at the lighthouse area. Vehicle transportation services based out of the Long Point and Great Island concession lodging areas would be available on a reservation basis to all approved areas on North and South Core Banks. Regularly scheduled vehicle transportation would be provided from the lighthouse area to the southern tip of Cape Lookout, and to other places on South Core Banks on a limited reservation basis. Visitors would be able to pay for land transportation services on the islands. Efforts to enhance the visitor experience and reduce congestion (particularly in the lighthouse area) could occur by implementing operational improvements, ensuring better coordination between ferry and land transportation services, and providing more direct NPS oversight of operations.

### Other Commercial Services

Rustic overnight lodging would continue to be available at Long Point (20 cabins) and at Great Island (25 cabins). As proposed by the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007), all contributing structures will be stabilized. Of these, 8–10 structures would be used for overnight visitor stays under a concessions operation (see appendix A). Limited visitor supplies (e.g., water, ice, fuel, and insect repellent) would remain available at the lighthouse area and the Long Point and Great Island concession lodging areas. In addition, drink and

snack vending machines could be provided and would be discretely located at Portsmouth Village Historic District Long Point, Great Island, the lighthouse area, and Cape Lookout Village Historic District. Commercial hunting and fishing guide services, environmental tours, and chartered fishing and sailing excursions would continue to be offered but with enhanced NPS oversight. Kayak rentals on the islands would facilitate visitor exploration of the national seashore's waters. Day-use and concession-operated overnight visitation would occur in the Cape Lookout Village Historic District, and day-use-only visitation would continue at Portsmouth Village Historic District. Structures and facilities on the islands adapted for large group activities would consist of those near the Cape Lookout Village Historic District that are used by nonprofit organizations for environmental education.

#### **Commercial Service Locations at the National Seashore**

Existing NPS facilities supporting public use, commercial services, and NPS operations would be at the Portsmouth Village Historic District, Long Point, Great Island, the lighthouse area and Cape Lookout Village Historic District, Shackleford Banks, and the Harkers Island Visitor Center boat basin.

#### **Resource Protection**

Natural and cultural resource management would follow existing NPS policies for research, inventory, monitoring, and treatment. Natural resource management would emphasize protection and rehabilitation of sensitive species and ecosystems, water resources, and other resources such as the natural soundscape. Cultural resource management would emphasize protection and preservation of national register-listed or eligible properties, such as the Cape Lookout Village Historic District and Portsmouth

Village Historic District. NPS staff would provide comprehensive training of concessions operators to improve resource protection efforts. Enhanced visitor education and interpretation would be used to complement resource protection strategies along with increased monitoring and ranger patrols.

#### **National Seashore Operations / Facilities**

Existing facilities would be maintained and improved / adapted as necessary with limited new facility construction at current arrival locations to support projected visitor demands for transportation, rental services, and sales of supplies. All visitor facilities would be made accessible in accordance with the Architectural Barriers Act Accessibility Standards (May 8, 2006). The Harkers Island Visitor Center dock would be improved / expanded to accommodate NPS and commercial ferry departures. As currently approved, 8-10 structures in the Cape Lookout Village Historic District will be rehabilitated for overnight visitor accommodations through a concessions operation. The Park Service would continue to provide dump stations at Portsmouth Village, Long Point, Great Island, and the cape. The Park Service would continue to provide vehicle parking/storage lots at the Long Point and Great Island lodging areas and the cape, as well as a visitor boat mooring area at Great Island. A Web site would be developed to gather information from visitors about the level of service, and the commercial service providers would be required to have facilities that meet minimum standards relative to accessibility. The Park Service would institute measures to ensure quality control of commercial operations, including departure locations and routes.

The appropriate level and number of commercial operations would be determined and authorized under concessions contracts and/or commercial use authorizations. At mainland departure locations, commercial service operators would provide permanent

restrooms meeting NPS standards, information and literature regarding the national seashore, and adequate parking as feasible. An increase in NPS personnel (e.g., maintenance, interpretation, law enforcement, and commercial services management) would be required commensurate with the expanded level of commercial operations and visitor use. This could require up to the equivalent of about three full-time positions for administrative management of commercial services, maintenance, interpretation, and law enforcement.

### **Interpretation / Education / Orientation**

The current scope of NPS visitor interpretive programs and activities would continue, including natural history programs and talks and scheduled tours of the lighthouse. Environmental education programs administered by nonprofit organizations would continue to be offered in the Cape Lookout Village area. Commercial service operators could assist NPS interpretive activities by providing in-depth visitor programs on topics such as the seashore's natural and cultural history. The Park Service would ensure that commercial operators provide visitors with consistent and approved interpretive information, orientation, and literature. The Park Service would also increase its oversight of commercial operations in part by requiring operators to receive NPS-provided training and by regularly evaluating operator performance. Enhanced visitor orientation would occur by increasing the NPS presence at mainland ferry departure points and by coordinating visitor departures from the Harkers Island Visitor Center dock with prior orientation at the visitor center.

### **ALTERNATIVE C**

Under alternative C (as under alternative B) the national seashore would improve the management and operation of commercial

services. This alternative would be similar to alternative B in providing visitor opportunities for solitude and would offer a broad range of commercially provided opportunities to participate in guided tours. Visitor opportunities to explore the seashore would increase with the use of improved and expanded commercially available water and land public transportation services. Visitors would have more opportunities for education about the national seashore and awareness of the national seashore's resources. As necessary and appropriate, additional support facilities and services would be provided at existing arrival locations and possibly new sites on the mainland. Current opportunities would remain for those seeking solitude and self-directed activities, and a diverse range of facilitated activities could be provided that perhaps incorporate concession-guided services (e.g., special events, cultural demonstrations, kayak tours, nighttime hikes, and lighthouse and historic district tours). Reservation-based ferry service could be provided to facilitate specialized activities, such as eco-tours focusing on particular areas or resources of the national seashore.

### **Visitor Ferry Access**

Under one or more commercial services instruments, vehicle and passenger ferries would operate from locations at or near Atlantic, North Carolina, to Long Point on North Core Banks, and at or near Davis, North Carolina, to Great Island on South Core Banks. Additionally, at least one passenger ferry would operate from private mainland docks on the following routes: from Ocracoke to Portsmouth Village (North Core Banks); from Harkers Island and Beaufort to Shackleford Banks and the Cape Lookout lighthouse area (South Core Banks); and from Morehead City to Shackleford Banks. An additional passenger ferry route could be authorized to shorten the travel time to Portsmouth Village from a Down East location. Ferries would typically operate from March

15th to December 31st, but service would be expanded to perhaps include extended summer hours of operation, more daily trips, and extended operations into off-season periods under a reservation system. Ferries capable of accommodating large groups (up to 150 passengers at a time) would also be brought into service as feasible. Consistent departure schedules would be established for all ferry services. Dock improvements at the Harkers Island Visitor Center boat basin would enable departures from this location for commercial ferry operators and provide private boaters with short-term moorage while going to the visitor center. Visitor ferry transportation would be provided between the barrier islands on a reservation basis.

### Land Transportation on the Islands

Vehicle access would be available for private vehicles brought over mostly by commercial ferries. Concession-guided low-impact vehicle tours would be provided at Portsmouth Village Historic District and Cape Lookout Village Historic District, and similar operations based out of the Long Point and Great Island concession lodging areas would be available on a scheduled basis to all approved areas on North and South Core Banks. Rental of low-impact vehicles for individual use and group tours would be provided at Long Point, Great Island, and at the lighthouse area. Regularly scheduled vehicle transportation would be provided from the lighthouse area to the southern tip of Cape Lookout and to other places on South Core Banks. Visitors would be able to pay for land transportation services on the islands. Efforts to enhance the visitor experience and reduce congestion (particularly in the lighthouse area) could occur by implementing operational improvements, ensuring better coordination between ferry and land transportation services, and providing more direct NPS oversight of operations.

### Other Commercial Services

Rustic overnight lodging would continue to be available at Long Point (20 cabins) and at Great Island (25 cabins). As proposed by the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007), all contributing structures will be stabilized. Of these, 8–10 structures would be used for overnight visitor stays under a concessions operation (see appendix A). Limited visitor supplies (e.g., water, ice, fuel, and insect repellent) would remain available at the lighthouse area and the Long Point and Great Island concession lodging areas. Packaged food items, and camp and fishing supplies would be sold at the concession lodging areas. In addition, drink and snack vending machines could be provided and would be discretely located at Portsmouth Village Historic District, Long Point, Great Island, the lighthouse area, and Cape Lookout Village Historic District. Commercial hunting and fishing guide services, environmental tours, and chartered fishing and sailing excursions would continue to be offered, but with enhanced NPS oversight. Kayak rentals on the islands would facilitate visitor exploration of the national seashore's waters. Day-use and concession-operated overnight visitation would occur in the Cape Lookout Village Historic District. Day-use visitation would continue at Portsmouth Village Historic District, and the Park Service would explore the possibility of overnight use there under a future planning effort. Structures suited for large organized group activities, such as the former gun club (not a historic structure), would be rehabilitated as needed to accommodate school groups, nonprofit environmental education organizations, and other appropriate functions. These facilities could be leased and operated by a commercial services provider.

### **Commercial Service Locations at the National Seashore**

NPS facilities supporting public and commercial services would be at the Portsmouth Village Historic District, Long Point, Great Island, the lighthouse area and Cape Lookout Village Historic District, Shackelford Banks, and Harkers Island Visitor Center boat basin.

### **Resource Protection**

Natural and cultural resource management would follow existing NPS policies for research, inventory, monitoring, and treatment. Natural resource management would emphasize protection and rehabilitation of sensitive species and ecosystems, water resources, and other resources such as the natural soundscape. Cultural resource management would emphasize protection and preservation of national register-listed or eligible properties, such as the Cape Lookout Village Historic District and Portsmouth Village Historic District. The Park Service would provide comprehensive training of concessions operators to improve resource protection efforts. Enhanced visitor education and interpretation would be used to complement resource protection strategies along with increased monitoring and ranger patrols.

### **National Seashore Operations / Facilities**

Existing facilities would be maintained and improved / adapted as necessary, with moderate new facility construction at current arrival locations on the islands and possibly at new locations on the mainland to support projected visitor demands for transportation, rental services, and sales of supplies. All visitor facilities would be made accessible in accordance with the Architectural Barriers Act Accessibility Standards (May 8, 2006). The Harkers Island Visitor Center dock would be improved / expanded to accommodate NPS and commercial ferry departures. As currently approved, 8–10 structures in the Cape

Lookout Village Historic District would be rehabilitated for overnight visitor accommodations. The Park Service would continue to provide dump stations at Portsmouth Village, Long Point, Great Island, and the cape. The Park Service would continue to provide vehicle parking/storage lots at the Long Point and Great Island lodging areas and the cape, as well as a visitor boat mooring area at Great Island. Improved dock or mooring access would be provided for private boats at Great Island, Long Point, and near the lighthouse. The Park Service would institute measures to ensure quality control of commercial operations, including departure locations and routes. The appropriate level and number of commercial operations would be determined and authorized under concessions contracts and/or commercial use authorizations. At mainland departure locations, commercial service operators would provide permanent restrooms meeting NPS standards, information and literature regarding the national seashore, and adequate parking as feasible. A Web site would be developed to gather information from visitors about the level of service, and the commercial service providers would be required to have facilities that meet minimum standards relative to accessibility. This could require up to the equivalent of about four full-time employees for administrative management of commercial services, maintenance, interpretation, and law enforcement.

### **Interpretation / Education / Orientation**

The current scope of NPS visitor interpretive programs and activities would continue, including natural history programs and talks and scheduled tours of the lighthouse. Environmental education programs administered by nonprofit organizations would be continued in the Cape Lookout Village Historic District. Commercial service operators could assist NPS interpretive activities by providing in-depth visitor programs on topics such as the national seashore's natural and cultural history. The number and diversity of

educational and guided services / tours would be increased over current levels to allow visitors to experience more of the seashore in both guided and unguided contexts. The Park Service would ensure that commercial operators provide visitors with consistent and approved interpretive information, orientation, and literature. The Park Service would also increase its oversight of commercial operations in part by requiring operators to receive NPS-provided training and by regularly evaluating operator performance. Enhanced visitor orientation would occur by increasing the NPS presence at mainland ferry departure points and by coordinating visitor departures from the Harkers Island Visitor Center dock with prior orientation at the visitor center.

#### **KEY DIFFERENCES BETWEEN ALTERNATIVES B AND C**

Several actions proposed for alternatives B and C are the same (e.g., improvements to ferry service operations / management, measures to improve visitor orientation and disperse access to the national seashore). However, alternative C would provide visitors with the highest level of in-depth and diverse experiences with emphasis on facilitated group tours and activities. Alternative C would also entail a slightly greater degree of facility development in support of commercial services. The following actions, specific to alternative C, represent the principal differences in comparison with alternative B:

- Increase the number and diversity of educational and guided services / tours over current levels to allow visitors to experience more of the seashore in both structured and unstructured contexts.
- Provide additional support facilities and services at existing arrival locations and possibly new sites on the mainland as necessary and appropriate.
- Possibly provide reserved ferry service to facilitate specialized activities such as eco-tours focusing on particular areas or resources of the national seashore.
- Provide limited concession-guided low-impact vehicle tour operations based from Long Point and Great Island concession lodging areas on a scheduled basis.
- Provide rental of low-impact vehicles for individual use and group tours at Long Point, Great Island, and at the lighthouse area.
- Explore the possibility of overnight use at Portsmouth Village Historic District under a future planning effort.
- Rehabilitate structures suited for large organized group activities, such as the former gun club, as needed to accommodate school groups, nonprofit environmental education organizations, and other appropriate functions. Allow lease and operation of these facilities by a commercial services provider.
- Provide for the sale of packaged food items, groceries, and camp and fishing supplies at the concession lodging areas.
- Improve dock or mooring access for private boats at Great Island, Long Point, and near the lighthouse.

## COSTS

The costs of implementing the alternatives were evaluated in the “Choosing by Advantage” process. For the purposes of the process, general assumptions were made regarding the extent of the work to be undertaken and amount of staff needed. The

costs are not intended to replace more detailed consideration of operational needs and final construction estimates. They should not be used as a basis for funding requests or budgeting. Cost information is summarized in the table below.

**TABLE 1: SUMMARY OF COMPARATIVE COSTS (FISCAL YEAR 07 DOLLARS)**

	ALTERNATIVE A		
	NO ACTION	ALTERNATIVE B	ALTERNATIVE C
Capital Costs (One-time)	\$0.00	\$550,000	\$1,745,000*
Operational Costs (Annual)	\$0.00	\$ 95,000**	\$ 95,000**
Staffing (Annual)	\$0.00***	\$113,000****	\$ 141,000****
<b>Total</b> (FY07 dollars)	\$0.00	\$758,000	\$1,981,000

\* Includes rehabilitation of the former gun club.

\*\*Annual costs for increased maintenance of back roads and at the visitor center as a result of anticipated higher visitation numbers.

\*\*\*Currently duties for concession management are handled by more than one position that is equivalent to 0.5 full-time employee at \$42,000 annually.

\*\*\*\*Totals for additional interpretive, law enforcement, maintenance, and concession management staff.

## IDENTIFICATION OF THE PREFERRED ALTERNATIVE

All alternatives were evaluated using a process called “Choosing by Advantages” (CBA). This process evaluated alternatives by identifying and comparing the relative advantages of each according to a set of criteria. Alternative B achieved the highest score of the alternatives evaluated, and is the NPS preferred alternative.

The CBA process determines which alternative provides the greatest advantage. To ensure a logical and trackable process, the criteria used to evaluate the alternatives were derived from the primary issues and impact topics.

For this plan, alternatives were evaluated to determine how well they would maximize the following:

- the diversity of transportation to and within the national seashore
- the diversity of visitor experience
- the protection of resources
- the efficiency of operations and use of facilities

The alternatives were rated on attributes relating to each of the above factors. The advantages of the attributes were compared.

Alternative A (the no-action alternative) was evaluated as having some advantages with regard to the protection of resources because

it would not entail additional development for commercial services beyond what is currently planned or underway. This would serve to protect resources from associated environmental disturbances. However, Alternative A had no advantages in comparison with Alternatives B and C because it would not appreciably contribute to opportunities for enhancing the diversity of transportation, the diversity of visitor experiences, or the efficiency of operations and facility use.

Alternatives B and C were evaluated as having nearly equivalent advantages with regard to maximizing diversity of transportation to and within the national seashore. The increased emphasis under alternative C on providing guided / facilitated group tours and activities, perhaps with special reserved ferry service, led to the evaluation of alternative C as having slightly higher advantages for maximizing the diversity of visitor experiences. With regard to protection of resources, alternative B ranked higher than alternative C because it entails less facility development in support of commercial services at existing ferry arrival locations and thus would involve less environmental disturbance. Alternative B also ranked higher than alternative C for maximizing efficiency of operations and use of facilities because it requires less NPS staff and budgetary increases to construct and maintain facilities and supporting infrastructure for commercial services.

## EVALUATION CRITERIA FOR NECESSARY AND APPROPRIATE COMMERCIAL VISITOR SERVICES

The National Park Service must determine the types and levels of commercial visitor services that are necessary and appropriate to achieve visitor experience and resource protection objectives. As part of this commercial visitor services plan, the national seashore has developed evaluation criteria for determining whether current and potential services are necessary and appropriate. In implementing the plan, the evaluation process will be used to respond to requests from private individuals, corporations, or other entities desiring authorization to provide commercial visitor services. Decisions as to what visitor services are necessary and appropriate for a particular area are made on a case-by-case basis by the Park Service (based on the criteria below and public input if appropriate). The criteria provide an objective means of screening services and activities and allowing NPS managers to respond to requests in a timely and consistent manner.

The evaluation criteria were developed based on legal requirements and the national seashore's purpose, significance, mission goals, and applicable management plans. The criteria also reflect desired conditions for resource protection, visitor experience, and NPS operations and facilities. Potential commercial visitor services and activities will be evaluated for consistency with the laws, policies, and regulations that guide NPS management of the national seashore (see pages 7–9) and the evaluation criteria below. Services and activities are considered appropriate if they conform to these conditions and management requirements and support the national seashore's mission goals. Necessary visitor services and activities are those found to be appropriate, and also determined essential for the national seashore to achieve its mission objectives.

**TABLE 2: COMMERCIAL SERVICES EVALUATION CRITERIA**

Necessary	Appropriate
<p>A service/activity that is necessary achieves one or more of the following:</p> <ol style="list-style-type: none"> <li>1. It makes available an essential service or facility not provided by the National Park Service at the national seashore.</li> <li>2. It enhances visitor experience consistent with the purpose and significance of the national seashore.</li> <li>3. It contributes to visitor education, understanding, and appreciation of the national seashore's resources.</li> <li>4. It assists the national seashore in efficiently and effectively managing visitor use opportunities.</li> </ol>	<p>A service/activity that is appropriate achieves all of the following:</p> <ol style="list-style-type: none"> <li>1. It is consistent with the purpose and significance of the national seashore.</li> <li>2. It is consistent with laws, regulations, and policies.</li> <li>3. It does not result in unacceptable risks to public health and safety.</li> <li>4. It does not have unacceptable impacts on the national seashore's resources or values.</li> <li>5. It does not unduly conflict with other uses and activities at the national seashore.</li> <li>6. It does not exclude the general public from participating in recreational opportunities.</li> </ol>

The criteria in the table above were used to determine if commercial visitor services and activities at the national seashore are/would be necessary and appropriate.

Current commercial visitor services and additional services proposed in the preferred alternative of this plan were found to be appropriate and, as summarized below, were evaluated as meeting the criteria of necessary services:

- Ferry transportation to and between the barrier islands meets all four of the criteria for necessary commercial visitor services. Because there are no bridges linking the outer islands to the mainland, passenger and vehicle ferries are an essential means for visitors without private boats to access the islands. The ferries are a critical link for most visitors to experience recreational opportunities on the barrier islands, and to gain greater understanding of the national seashore's natural and cultural resources beyond the information presented at the main visitor center on Harkers Island.
- Land transportation services on the islands, and the rental of canoes, kayaks, and low-impact vehicles would provide visitors with opportunities to explore more of the national seashore than just the areas within walking distance of the island ferry landings. These transportation services allow visitors to gain broader understanding of the national seashore's resources, to have a wide variety of recreational opportunities, and to provide a means to disperse and avoid the congestion sometimes encountered at the ferry arrival locations. These services address criteria 2, 3 and 4 for necessary visitor commercial services.
- Lodging facilities on the islands contribute to criteria 2 and 3 for necessary commercial visitor services. These facilities (including the Long Point and Great Island camps and the proposed use of historic structures in the Cape Lookout Village Historic District) offer visitors overnight or extended stays on the barrier islands. Visitors would have opportunities for more in-depth educational and recreational experiences by extending their stays at the national seashore. The rustic lodging facilities are equipped with basic amenities in keeping with the national seashore's goals of conserving resources and providing sustainable recreational activities.
- Provision of limited visitor supplies (e.g., water, ice, fuel, insect repellent) at the lighthouse area and the Long Point and Great Island camps addresses criterion 2 for necessary visitor commercial services. Although visitors are advised to bring their own water and supplies, the availability of limited supplies for purchase on the islands would add to their comfort and safety (particularly for unprepared visitors) and allow them to better cope with unpredictable and sometimes harsh conditions.
- Educational programs and guided recreational tours (including tour rental of low-impact vehicles) address criteria 2, 3, and 4 for necessary commercial visitor services. Commercial service providers can assist the Park Service in offering in-depth educational / interpretive programs to enhance visitor understanding and appreciation of the national seashore's resources. Guided group tours would also fulfill NPS objectives for expanding recreational and educational opportunities, more widely dispersing visitors throughout the national seashore, and providing greater oversight of activities to assure resource protection.

## USER CAPACITY

In the process of planning for a park unit, the National Park Service is required to address user capacity management. The Park Service defines user capacity as the type and level of visitor use that can be accommodated while sustaining the quality of park resources and visitor experiences. Managing for visitor use includes establishing desired conditions, monitoring and evaluating these conditions, applying management strategies, and making adjustments to ensure that park values are protected. Planning for user capacity is most often accomplished at the general management plan level, a broader planning process than that conducted for commercial visitor services plans. As with all planning efforts, managing for user capacity involves remaining consistent with the purposes of the park unit.

At the general management plan level, management zones address carrying capacity through qualitative descriptions of desired resource conditions and visitor opportunities. The national seashore's current (1982) *General Management Plan* describes four primary zones. The zones support the underlying philosophy of resource management that the national seashore would be allowed to revert to a natural state or be restored to natural conditions everywhere except in the historic, development, and special-use zones. The zones are as follows:

- **Natural Zone:** This zone is managed to perpetuate natural geomorphic processes, vegetation, and animal life.
- **Historic Zone:** Preservation, protection, and interpretation of cultural resources and their settings are emphasized in this zone. Some structures might be perpetuated through adaptive use.
- **Park Development Zone:** Facilities that are essential for visitor use, interpretation, and park management are in this zone. The zone is likely to have more intensive use than other zones, and there could be

alteration of the natural or historic environment.

- **Special Use Zone:** In this zone, the Park Service's administrative management over the land use is secondary to another entity, whether private or public.

Under the 1982 *General Management Plan*, user capacity is based on management objectives, ecological constraints, and desired visitor experience. The fundamental management objective is to provide outdoor recreation opportunities while conserving natural features. Ecological constraints are based on the relative intensities of use that could be tolerated without unacceptable resource impacts. For example, most of the year the beach and berm areas are more resilient to use and can tolerate higher densities of people without permanent resource damage. Grasslands and shrub thickets are less tolerant to trampling, and moderate use is appropriate in these areas. The dunes and saltwater marsh are the most sensitive to visitor use, and intense use can result in damage including loss of vegetation, disruption of animal habitat, and interruption of the food chain.

In more recently prepared general management plans for other park units, action alternatives include indicators and standards against which park staff can measure and evaluate damage to resources or identify compromised visitor experiences. An indicator is a measurable variable that can be used to monitor and track changes in resource conditions and visitor experiences to determine if desired conditions are being met. A standard is the minimum acceptable condition for an indicator. If a standard is not met, management strategies may be adjusted to minimize impacts.

There are no recent comprehensive surveys and studies to provide supporting data for developing indicators, standards, and a range

of actions for management of visitor use. As part of the scoping process for the *Off-Road Vehicle (ORV) Management Plan* (in progress), a survey was conducted to obtain feedback from visitors. However, the survey was specific to the ORV plan and more information is needed to develop indicators, standards, and visitor use management actions for the national seashore in general. Off-road vehicle use and other land transportation is provided under the alternatives presented in this commercial visitor services plan, but NPS management of ORV use with regard to user capacity considerations will be deferred to the

*Off-Road Vehicle (ORV) Management Plan* or a future general management plan.

The process of developing overall indicators, standards, and a range of actions for management of visitor use for the entire national seashore will be accomplished in the future during the preparation of the national seashore's general management plan. Until then, the philosophy described in the present general management plan provides guidance for seashore staff regarding visitor use and resource management.

## MITIGATIVE MEASURES

Mitigation measures are analyzed as part of the alternatives. These have been developed to lessen the potential adverse impacts of the proposed actions, and/or to present measures the Park Service would follow in the event of unexpected occurrences during the course of construction.

- Should construction unearth previously undiscovered archeological resources, work would be stopped in the area of the discovery, and the national seashore staff would consult with the state historic preservation officer and the Advisory Council on Historic Preservation, as necessary, according to 36 CFR 800.13 (*Post Review Discoveries*). In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) would be followed.
- All sensitive cultural resources would be clearly marked for avoidance to protect them from construction disturbance. All workers would be informed of the penalties for illegally collecting artifacts or intentionally damaging cultural resources. Workers would also be informed of the correct procedures to follow in the event previously unknown resources are uncovered during construction.
- Before any construction activity, construction zones would be clearly delineated with stakes or by other means to confine activity to the minimum area required for construction. All protection measures would be clearly stated in the construction specifications, and workers would be instructed to avoid conducting activities beyond the construction zone.
- Best management practices would be used during construction and rehabilitation activities to minimize impact to air quality from increased dust or other particulate matter. These practices could include keeping disturbed sand moist to minimize dust.
- Visitors would be informed in advance of proposed construction and directed away from construction areas to avoid safety hazards and minimize visitor use conflicts.
- Best management practices would be used during construction to minimize soil disturbance and the potential for erosion in the project area. Erosion control methods could include (but not be limited to) use of filter cloth and silt fencing.
- To avoid introduction of exotic plant species, no hay bales or other organic material would be used in erosion control measures. Standard measures that involve only inorganic materials (e.g., silt fences and/or sand bags) would be used.
- The national seashore would ensure that all historic properties proposed for occupancy, adaptive use, and interpretation are free of hazardous materials and meet accepted health and safety standards before use or occupation.
- Fueling of all machinery would be conducted only in approved equipment staging areas away from sensitive water bodies. Any spills of hazardous materials, fuel, etc., would be cleaned up immediately to prevent contamination or discharge into groundwater aquifers, wetland areas, or other water bodies.
- The national seashore would comply with applicable state and local regulations to minimize the impacts on water quality associated with wastewater management. Best available technologies would be used to minimize nitrogen levels in treated effluent and limit the introduction of

treated freshwater into the estuarine environment in efforts to minimize localized changes in water chemistry.

- NPS staff would limit the use of artificial outdoor lighting to that necessary for basic safety requirements and ensure that all sources of artificial light are shielded to the maximum extent practicable. Visitors would also receive information on responsible use of artificial lights to minimize environmental impacts.
- The National Seashore is a trash-free park and does not collect trash. In concession-operated areas, refuse would be regularly collected by concession providers. Animal-proof collection devices would be installed to prevent wildlife from eating refuse.
- Plant materials used for revegetation efforts would be native to the national seashore.
- All commercial service operators and their staff would be required to attend

interpretive training sessions provided by interpretive staff at the national seashore. The training would enable commercial service operators and their staff to provide appropriate orientation to the national seashore to their clients as well as an overview of primary interpretive themes. These efforts would support resource protection strategies on the island by providing visitors with information to become stewards of the resources at the national seashore. The orientation information would include discussion of the importance of observing beach closures to protect threatened and endangered species and other resource management concerns.

- All structures constructed to store equipment would be, to the extent practicable, built near existing development, in areas previously disturbed if possible, and set back from the water line. These structures would be designed to minimize interference with water flow across the island during storm events and other natural processes.

## ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is defined by the Council on Environmental Quality as the alternative that best meets the following criteria or objectives, as set out in the National Environmental Policy Act (sec. 101):

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

With slight differences, the alternatives similarly fulfill the six criteria by preserving and protecting the national seashore's significant cultural and natural resources while providing for a diverse range of recreational opportunities in a safe and environmentally responsible and sustainable manner. Alternative A (no action) best meets criteria #3 because it entails no or minimal

new development in support of commercial services beyond that already underway or planned. Of the action alternatives, alternative B best achieves criteria #3 and #4 because it entails comparably less development and associated environmental impacts, with all new or adapted facilities and infrastructure at currently developed activity nodes. In contrast with alternative C, alternative B would not adapt the former gun club on South Core Banks for large group activities, and would not permit rental of low-impact vehicles for individual visitor use. Although this would represent a minor decrease in visitor use opportunities compared with alternative C, the national seashore would be able to better protect resources under supervised group vehicle tours, and would not incur the additional challenges of adapting the gun club building.

Alternative B, by emphasizing the retention of the national seashore's natural and undeveloped character and largely rustic visitor experiences, also best meets criteria #2 and #5. The aesthetically and culturally pleasing surroundings of the national seashore would best be preserved and enhanced with minimal new development in support of commercial services. Alternative B also presents a more balanced approach to accommodating improvements to visitor use and access while preserving important natural and cultural resources.

As evaluated in this document, the preferred alternative (B) is the environmentally preferred alternative. The preferred alternative best meets the six criteria presented in the National Environmental Policy Act (section 101).

## ALTERNATIVES CONSIDERED AND DISMISSED FROM FURTHER ANALYSIS

An alternative (originally referred to as “alternative B”) was dismissed from further analysis following the CBA evaluation. This alternative was presented in the March 2007 NPS newsletter to the public regarding the *Commercial Services Plan*. The underlying concept of the alternative was to maximize the national seashore’s untrammelled environment, limit new development and commercial services beyond what are currently available, and generally provide for a rustic,

unstructured visitor experience. The planning team determined that the scope of this alternative was closely aligned with alternative A (the no-action alternative) and therefore did not present substantial or measurable differences in comparison with what is already occurring or planned for the national seashore. The former alternative B was therefore dismissed from further consideration.

**TABLE 3: SUMMARY OF ALTERNATIVES**

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Concept</b>	Continue the current scope and level of commercial services without substantial modification.	Sustain a rustic and mostly unstructured visitor experience. Maintain the natural, remote character of the seashore. Increase visitor opportunities to explore the seashore using improved and expanded commercially available water and land public transportation services.	Similar to alternative B in providing visitor opportunities for solitude plus offers a broad range of commercially provided opportunities to participate in guided tours. Increase visitor opportunities to explore the seashore using improved and expanded commercially available water and land public transportation services.
	Ensure conformance with most recent concession law and policy.	Improve the management and operation of commercial services to conform to recent concession law and policy and enhance visitor experiences.	Same as alternative B.
		Increase education and resource awareness for visitors.	Same as alternative B.
		Provide limited new development, but provide additional support facilities and services at existing arrival locations as necessary and appropriate.	Provide additional support facilities and services at existing arrival locations and possibly new sites on the mainland as necessary and appropriate.
		Continue current opportunities for those seeking solitude and self-directed activities; provide a range of facilitated activities that perhaps incorporate concession-guided services.	Continue current opportunities for those seeking solitude and self-directed activities; provide a higher level of facilitated activities than under alternative B that perhaps incorporate concession-guided services.
			Possibly provide reserved ferry service to facilitate specialized activities.
<b>Visitor Ferry Access</b>	Continue to operate vehicle and passenger ferries from Atlantic to Long Point and from Davis to Great Island.	Under one or more commercial service instruments, operate vehicle and passenger ferries from locations at or near Atlantic to Long Point on North Core Banks and at or near Davis to Great Island on South Core Banks.	Same as alternative B.

CHAPTER 2: ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Visitor Ferry Access (cont.)</b>	Operate at least one passenger ferry from private mainland docks from Ocracoke to Portsmouth Village; from Harkers Island and Beaufort to Shackleford Banks and the Cape Lookout lighthouse area; and from Morehead City to Shackleford Banks	Same as alternative A	Same as alternative A.
		Possibly authorize another passenger ferry route to Portsmouth Village from a Down East location.	Same as alternative B.
		Expand service to perhaps include additional ferries, extended summer hours of operation, more daily trips, and extended operations into off-season periods under a reservation system.	Same as alternative B.
		Bring ferries capable of accommodating large groups (up to 150 passengers at a time) into service as feasible.	Same as alternative B.
		Establish more consistent departure schedules for all ferry services.	Same as alternative B.
		Improve Harkers Island Visitor Center boat basin dock and provide for regular departures of commercial ferry operators from the boat basin. Allow private boats access to the boat basin for short-term moorage while at the visitor center.	Same as alternative B.
		Provide visitor ferry transportation between the barrier islands on a reservation basis.	Same as alternative B.
<b>Land Transportation on the Islands</b>	Keep vehicle access for private vehicles brought over by ferries.	Same as alternative A.	Same as alternative A.

Table 3: Summary of Alternatives

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Land Transportation on the Islands (cont.)</b>	Continue to provide concession-guided ATV tours at Portsmouth Village. Continue to provide vehicle transportation services from Long Point and Great Island concession lodging areas on a limited reservation basis.	Provide concession-guided low-impact vehicle tours at Portsmouth Village and add low-impact-vehicle tours from Long Point, Great Island, and the cape. Continue to provide vehicle transportation services from Long Point and Great Island concession lodging areas on a reservation basis.	Same as alternative B except tours would be on a scheduled basis rather than a reservation basis.
	Provide regularly scheduled vehicle transportation from lighthouse area to the southern tip of Cape Lookout and to other places on the South Core Banks on a limited reservation basis.	Provide regularly scheduled vehicle transportation from lighthouse area to the southern tip of Cape Lookout and to other places on the South Core Banks on a limited reservation basis.	Provide regularly scheduled vehicle transportation from lighthouse area to the southern tip of Cape Lookout and to other places on the South Core Banks.
		Provide rental of low-impact vehicles for group tours at Long Point, Great Island, and at the lighthouse area.	Provide rental of low-impact vehicles for individual use and group tours at Long Point, Great Island, and at the lighthouse area.
	Pay operators for land transportation services on mainland, before going to the islands.	Pay operators for land transportation services on the islands.	Same as alternative B.
		Enhance visitor experience and reduce congestion (particularly in the lighthouse area) by implementing operational improvements, ensuring better coordination between ferry and land transportation services, and providing more direct NPS oversight of operations.	Same as alternative B.

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Other Commercial Services</b>	Continue rustic lodging at Long Point (20 cabins) and Great Island (25 cabins). As proposed by the <i>Cape Lookout Village Historic Structures Reuse Implementation Plan</i> (NPS 2007), all contributing structures at the Cape Lookout Village Historic District will be stabilized. Of these, selected structures would be used for overnight visitor stays under a concessions operation.	Same as alternative A.	Same as alternative A.
	Continue offering limited visitor supplies (e.g., water, ice, fuel, and insect repellent) at the lighthouse area and the Long Point and Great Island concession lodging areas.	Same as alternative A.	Same as alternative A.
		Could provide drink and snack vending machines (discretely) at Portsmouth Village, Long Point, Great Island, the lighthouse area, and the Cape Lookout Village Historic District.	Same as alternative B.
			Allow sale of packaged food items, groceries, and camp and fishing supplies at the concession lodging areas.
	Continue to offer limited commercial hunting and fishing guide services, environmental tours, and chartered fishing and sailing excursions as proposed and organized primarily by private vendors.	Offer a range of commercial hunting and fishing guide services, environmental tours and chartered fishing and sailing excursions under enhanced NPS oversight.	Same as alternative B.
	Continue to provide kayak rental and transport services through mainland concessioners.	Provide kayak rentals on the islands to facilitate visitor exploration of the national seashore's waters.	Same as alternative B.

Table 3: Summary of Alternatives

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Other Commercial Services (cont.)</b>		Provide day-use and concession-operated overnight visitation in the Cape Lookout Village Historic District, and continue day-use-only visitation at Portsmouth Village.	Same as alternative B.
			Explore the possibility of overnight use at Portsmouth under a future planning effort.
		Continue using facilities within the Cape Lookout Village Historic District by nonprofit organizations for environmental education.	Same as alternative B.
			Rehabilitate structures suited for large organized group activities, like the gun club, as needed to accommodate school groups, nonprofit environmental education organizations, and other appropriate functions. Allow lease and operation of these facilities by a commercial services provider.
<b>Commercial Services Locations at the National Seashore</b>	Retain NPS facilities supporting public use, commercial services, and NPS operations at the Portsmouth Village Historic District, Long Point, Great Island, the lighthouse area and Cape Lookout Village Historic District, and Shackleford Banks.	Same as alternative A plus use of the dock at the Harkers Island Visitor Center for commercial services.	Same as alternative B.

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Resource Protection</b>	Continue natural and cultural resource management under existing NPS policies. For natural resource management emphasize protection and rehabilitation of sensitive species and ecosystems, water resources, and other resources such as the natural soundscape. For cultural resource management, emphasize protection and preservation of national register-listed or -eligible properties.	Same as alternative A.	Same as alternative A.
		Provide comprehensive training of concessions operators to improve resource protection efforts. Enhance visitor interpretation and education to complement resource protection strategies along with increased monitoring and ranger patrols.	Same as alternative B.
<b>NPS Operations / Facilities</b>	Continue to maintain the facilities and infrastructure to support current and projected visitor use. Keep new facility construction for commercial services at a minimum level (what is planned or underway).	Maintain existing facilities and improve / adapt as necessary with new facility construction at current locations to support projected visitor demands for transportation and rental services and sales of supplies.	Maintain existing facilities and improve / adapt as necessary, with moderate new facility construction at current locations on the islands and possibly at new locations on the mainland to support projected visitor demands for transportation and rental services and sales of supplies.
		As necessary and appropriate, provide additional support facilities and services at existing arrival locations.	Same as alternative B.
		Improve/expand Harkers Island Visitor Center dock to accommodate NPS and commercial ferry departures.	Same as alternative B.

Table 3: Summary of Alternatives

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>NPS Operations / Facilities (cont.)</b>	Continue to provide dump stations at Portsmouth Village, the Long Point and Great Island lodging areas, and near the cape. Continue to provide vehicle parking/storage lots at Long Point, Great Island lodging areas, at the lighthouse area, and a visitor boat mooring area at Great Island.	Same as alternative A.	Same as alternative A.
	Develop Web site to gather information from visitors; require commercial service providers to have facilities that meet minimum accessibility standards.	Same as alternative A.	Same as alternative A.
			Improve dock or mooring access for private boats at Great Island, Long Point, and near the lighthouse.
		Institute measures to ensure quality control of commercial operations, including departure locations and routes.	Same as alternative B.
		Determine appropriate level and number of commercial operations and authorize under concessions contracts and/or commercial use authorizations.	Same as alternative B.
		At mainland departure locations, have commercial service operators provide permanent restrooms meeting NPS standards, and information and literature regarding the national seashore and adequate parking as feasible.	Same as alternative B.
		Increase NPS personnel commensurate with the expanded level of commercial operations and visitor use.	Same as alternative B.

CHAPTER 2: ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>Interpretation / Education / Orientation</b>	Continue the current scope of NPS visitor interpretive programs and activities. Continue environmental education programs administered by nonprofit organizations in the Cape Lookout Village Historic District area.	Same as alternative A.	Same as alternative A.
		Have commercial service operators assist NPS interpretive activities by providing in-depth visitor programs on topics such as the national seashore's natural and cultural history.	Same as alternative B.
			Increase the number and diversity of educational and guided services / tours over current levels to allow visitors to experience more of the seashore in both guided and unguided contexts.
		Increase NPS oversight of commercial operations in part by requiring operators to receive NPS-provided training and by regularly evaluating operator performance.	Same as alternative B.
		Ensure that visitors receive consistent and approved interpretive information, orientation, and literature.	Same as alternative B.
	Continue with minimal NPS presence at commercial ferry departure points and limited advance visitor orientation.	Enhance visitor orientation by increasing the NPS presence at mainland ferry departure points and by coordinating visitor departures from the Harkers Island Visitor Center dock with prior orientation at the visitor center.	Same as alternative B.

**TABLE 4: SUMMARY OF IMPACTS**

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>VISITOR USE AND EXPERIENCE</b>	<p>Long-term beneficial impacts would occur to visitor use and experience under alternative A (the no-action alternative) because of the retention of customary means of access to the barrier islands and the diversity of activities and interpretive opportunities available for visitors. Long-term minor to moderate adverse impacts would continue from limited NPS oversight and coordination of commercial service operations resulting in inconsistent visitor orientation and information. Visitors lacking information on land transportation opportunities and/or how to procure these services would continue to have limited opportunities to explore many areas of the national seashore, resulting in long-term minor to moderate adverse effects on visitor experience.</p> <p>The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative A's contribution to these cumulative impacts would be modest.</p>	<p>Long-term beneficial impacts would occur to visitor use and experience under alternative B because of expanded access throughout the national seashore, the diversity of recreational opportunities available to visitors, and operational and interpretive improvements.</p> <p>The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative B's contribution to these cumulative impacts would be modest.</p>	<p>Long-term beneficial impacts would occur to visitor use and experience under alternative C because of expanded access throughout the national seashore, the diversity of recreational opportunities available to visitors, and operational and interpretive improvements.</p> <p>The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative C's contribution to these cumulative impacts would be modest.</p>

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>CULTURAL RESOURCES</b>	<p>The overall impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District would be long term, negligible to minor, and adverse under alternative A.</p> <p>Long-term negligible to minor, adverse cumulative impacts would also occur (particularly in the lighthouse vicinity and Cape Lookout Village Historic District) as other proposed undertakings are implemented — such as stabilization and rehabilitation / adaptive use of historic structures and enhancement of the cultural landscape. Alternative A’s contribution to these impacts would be small.</p> <p>There would be no impairment of the national seashore’s resources or values.</p>	<p>The overall impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District would be long term, negligible to minor, and adverse under alternative B.</p> <p>Long-term, negligible to minor, adverse cumulative impacts would also occur (particularly in the lighthouse vicinity and Cape Lookout Village Historic District) as other proposed undertakings are implemented such as stabilization and rehabilitation / adaptive use of historic structures, and enhancement of the cultural landscape. Alternative B’s contribution to these impacts would be small.</p> <p>There would be no impairment of the national seashore’s resources or values.</p>	<p>The overall impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District would be long term, negligible to minor, and adverse under alternative C.</p> <p>The potential rehabilitation and adaptive use of historic structures at Portsmouth Village Historic District for overnight visitor lodging would have long-term, negligible to minor, adverse impacts provided that the rehabilitation was carried out in accordance with the <i>Secretary’s Standards</i>.</p> <p>Long-term, negligible to minor, adverse cumulative impacts would also occur (particularly in the lighthouse vicinity and Cape Lookout Village Historic District) as other proposed undertakings are implemented such as stabilization and rehabilitation / adaptive use of historic structures and enhancement of the cultural landscape. Alternative C’s contribution to these impacts would be small.</p> <p>There would be no impairment of the national seashore’s resources or values.</p>
<b>NATURAL RESOURCES</b>	<p>Under this alternative the long-term adverse impacts on wildlife from commercial service operations would be negligible because there would be no new disturbance to wildlife habitat or life activities. The long-term adverse impacts on wildlife from existing activities would continue to be negligible because the impacts would be highly localized.</p> <p>The long-term adverse impacts on wildlife associated with dispersal of visitors would continue to be negligible.</p>	<p>Under this alternative the long-term adverse impacts on wildlife from commercial service operations would range from negligible to moderate because of increased disturbance to habitat or disruption of important life activities.</p> <p>The long-term adverse impacts associated with expanded land transportation options, including the availability of low-impact vehicle tours at the lighthouse, Great Island, and Long Point, would be negligible because the transportation would continue to occur in existing</p>	<p>Under this alternative the long-term adverse impacts on wildlife from commercial service operations would range from negligible to moderate because of increased disturbance to habitat or disruption of important life activities.</p> <p>The long-term adverse impacts associated with expanded land transportation options, including the availability of low-impact vehicle tours at the lighthouse, Great Island, and Long Point, would be negligible because the transportation would continue to occur in existing</p>

Table 4: Summary of Impacts

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
	<p>The long-term adverse impacts associated with the ATV tours at Portsmouth Village would continue to be negligible.</p> <p>The cumulative adverse impact on wildlife at the national seashore from ORV use would continue under alternative A. The contribution of this alternative to the overall cumulative impacts would be very small.</p> <p>The cumulative adverse impact on wildlife at the national seashore from alternative A, together with the impacts of ORV use and the occupancy of the Cape Lookout Village Historic District would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be very small.</p> <p>There would be no impairment of the national seashore's resources or values.</p>	<p>transportation corridors and visitors on the tours would be accompanied by a guide.</p> <p>Dispersal of visitors across a wider area of the national seashore would have a minor to moderate adverse impact on wildlife because of the increased potential for intentional and unintentional harassment.</p> <p>The long-term adverse impacts on wildlife associated with the increased availability of food from snack sales and the development of additional infrastructure at activity points on the national seashore would with mitigation be negligible to minor. The long-term adverse impacts from increasing the type of tours available to visitors would be negligible, and the impacts of extending the hours ferry service is available to and from the seashore would be negligible to minor.</p> <p>The cumulative adverse impact on wildlife at the national seashore from implementing alternative B, together with the impacts of ORV use and the occupancy of the Cape Lookout Village Historic District would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be very small.</p> <p>There would be no impairment of the national seashore's resources or values.</p>	<p>transportation corridors and visitors on the tours would be accompanied by a guide.</p> <p>The dispersal of visitors across a wider area of the national seashore would have a minor to moderate adverse impact on wildlife because of the increased potential for intentional and unintentional harassment.</p> <p>The availability of low-impact vehicles for personal use without the benefit of a tour guide would have a long-term moderate adverse impact on wildlife at the national seashore because of the increased potential for intentional and unintentional harassment of wildlife.</p> <p>The long-term adverse impacts on wildlife associated with the increased availability of food items at the national seashore and the development of new facilities and the rehabilitation of the Gun Club or other group facilities would be negligible to minor.</p> <p>The long-term adverse impacts from increasing the type of tours available to visitors would be negligible, and the impacts of extending the hours ferry service is available to and from the seashore would be negligible to minor.</p> <p>The cumulative adverse impact on wildlife at the national seashore from alternative B, together with the impacts of ORV use and the occupancy of the Cape Lookout Village Historic District would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be small.</p> <p>There would be no impairment of the national seashore's resources or values.</p>

	<b>Alternative A, No Action</b>	<b>Alternative B, Preferred</b>	<b>Alternative C</b>
<b>SOCIOECONOMIC ENVIRONMENT</b>	<p>Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. These impacts would be short and long term on a local and regional county-wide basis for most businesses and their employees. The limited ability of the Park Service to fully provide for the public's enjoyment of national seashore resources could have long-term minor to moderate adverse impacts for the county's economy and business owners respectively. The impacts of other actions, together with the impacts of alternative A, would result in short- and long-term moderate adverse cumulative effects. The contribution of this alternative to cumulative impacts would be small.</p>	<p>Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. Improved services and expanded access could increase visitation and benefit the concession providers and local and regional economies exponentially. These impacts would be beneficial and long term on a local and regional county-wide basis for most businesses and their employees. Facility improvements and maintenance costs would have long-term beneficial impacts on the regional and local economies. The impacts of proposals in alternative B, together with the impacts of other actions described above, would result in overall long-term beneficial cumulative impacts.</p>	<p>Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. Improved services and expanded access could increase visitation and benefit the concession providers and local and regional economies exponentially. These impacts would be minor and long term on a regional county-wide basis, but at the local level they would be minor to moderate for most businesses and their employees. Facility improvements would have short- and long-term beneficial impacts to the regional economy, mostly in the construction industry.</p> <p>The impacts of proposals in alternative C, together with the impacts of other actions described above, would result in long-term overall beneficial cumulative impacts.</p>

Table4: Summary of Impacts

	Alternative A, No Action	Alternative B, Preferred	Alternative C
<p><b>NPS OPERATIONS AND FACILITIES</b></p>	<p>Under alternative A, the no action alternative, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance, management of commercial service operations at the national seashore, and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the seashore. Once the benchmarks and monitoring were in place, the impact on NPS operations would be beneficial. The impacts to operations associated with shortfalls in revenue would continue to be adverse and minor to moderate in the long term.</p> <p>The cumulative impacts on NPS operations, including the commercial services described for alternative A, would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be very small.</p>	<p>Under alternative B, the preferred alternative, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance. There would be a long-term benefit to NPS operational activities associated with the conversion of commercial use authorizations to contracts and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the national seashore. Visitors would have the opportunity to disperse over a larger area of the national seashore, but because visitors arriving at the seashore with a commercial service provider would have received appropriate orientation and interpretive information the long-term adverse impacts on operations would be negligible. The increases in interpretive and law enforcement staff and the assignment of a single staff person to manage commercial services would be a long-term benefit to NPS operations. The increase in revenue from commercial service operations would offset some adverse impacts on the operations at the national seashore and would have a long term beneficial impact.</p> <p>The cumulative impacts on NPS operations, including the commercial services described above for this alternative would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be small.</p>	<p>Under alternative C, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance. There would be a long-term benefit to NPS operational activities associated with the conversion of commercial use authorizations to contracts and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the national seashore. Visitors would have the opportunity to disperse over a larger area of the national seashore. Even though visitors arriving at the national seashore with a commercial service provider would have received appropriate orientation and interpretive information, the long-term adverse impacts from individual use of low-impact vehicles on operations would be minor. The increases in interpretive and law enforcement staff and the assignment of a single staff person to manage commercial services would be a long-term benefit to NPS operations.</p> <p>The cumulative impacts on NPS operations including the commercial services described in this alternative would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be appreciable.</p>



**CHAPTER 3:  
AFFECTED  
ENVIRONMENT**





## INTRODUCTION

The following discussions highlight resources and other management considerations of the national seashore that could be affected by implementation of the commercial services planning alternatives.

## VISITOR USE AND EXPERIENCE

The NPS Public Use Statistics Office reported 803,155 recreational visitors at Cape Lookout National Seashore in 2006, up from 692,857 in 2005. Monthly visitor use numbers have been documented from 1976 to the present. Annual visitation has grown at a rate of 6.3% between 1999 and 2006 (Dornbusch Assoc. 2007). The visitation statistics can be somewhat misleading, because a large percentage of visitors are local residents who use the picnic area adjacent to the national seashore headquarters on Harkers Island and don't necessarily travel to the outer islands. Although the national seashore is open year-round, the highest day-use visitation occurs during the summer (June to August) and is concentrated in the lighthouse area at the southern end of South Core Banks.

Recreational fishing accounts for heavy visitor use during the spring and fall (April to May, and September to November), characterized by overnight camping stays. Many fishermen drive four-wheel-drive or all-terrain vehicles to increase accessibility to productive fishing beaches. Some drive south from the Great Island area to fish along the coast near the lighthouse and Cape Lookout Village Historic District. They frequently camp near the historic district or return at night to cabins at the Great Island camp. Seasonal waterfowl hunting is also permitted in conformity with state and federal laws and NPS policies. Limited hunting and fishing guided services are available to visitors. A diverse array of other appropriate activities are popular among visitors including bird-watching, camping, hiking, boating and kayaking, wild horse watching on Shackleford Banks, shell collecting, and swimming. The state of North Carolina is in the process of developing a recreational trail between the Tennessee boundary and Jockey's Ridge State Park, known as the "Mountains to Sea Trail." A spur of the trail would pass through the Cape

Lookout National Seashore, providing visitors with another recreational opportunity.

According to NPS staff observations, most visitors are from the North Carolina region, including Charlotte and Raleigh-Durham. Most travel from Beaufort or Harkers Island on passenger ferries that typically arrive and depart between 8 a.m. and 5 p.m. and use the public dock north of the lighthouse. Between 2004 and 2006, approximately 50,000 ferry passengers arrived annually at the lighthouse area and Shackleford Banks. Passenger departures to these destinations were about equally divided between Harkers Island and Beaufort. Until it was taken out of service in 2006, one of the passenger ferries operating between Beaufort and the lighthouse area could accommodate up to 150 visitors at a time. For logistical reasons and to facilitate interpretation, there remains a strong demand for large-capacity ferries capable of transporting school groups and similar large groups for specialized functions and activities. A significant number of visitors travel to the cape on private motor boats. Sailboats, kayaks, and canoes are another popular means of exploring the national seashore, and guided tours and excursions are offered.

Although there are no developed roads, vehicles may be driven on the open ocean-side beach or on marked sand trails. Concession-operated vehicle ferry service is provided to South Core Banks at Great Island from Davis, and to North Core Banks at Long Point from Atlantic. Long-term parking areas are located near the cabin areas at Great Island and Long Point, and each accommodates about 60 vehicles. Areas along the beach are subject to seasonal closure for protection of turtle and shorebird nesting locations and to address other environmental protection and recovery efforts as needed. Parking is provided for private vehicles near the lighthouse area. Visitors with tickets that were previously

purchased on the mainland may take commercially operated vehicle tours and shuttles from the visitor orientation area near the lighthouse to other parts of the Cape Lookout Village Historic District and to the southern tip of South Core Banks. Concession-operated ATV tours of Portsmouth Village Historic District are also provided. Vehicles are not allowed on Shackleford Banks, which is a proposed wilderness area.

Two of the building complexes in the Cape Lookout Village Historic District have been adapted for use by nonprofit organizations for environmental education — the former Coast Guard station and the former house, store, and cabins built in the 1950s by Les and Sally Moore north of the central residential area.

From Memorial Day weekend through Labor Day weekend, the Park Service offers daily ranger-led interpretive programs throughout the seashore on a variety of topics. The Park Service also provides specially planned educational / interpretive group presentations for adults and children both at the national seashore and at off-site locations. The NPS Harkers Island Visitor Center provides visitors with interpretive exhibits and orientation to the seashore. The building was recently remodeled and expanded, and a new interpretive film (*Ribbon of Sand*) is shown in the theater addition. The Core Sound Waterfowl Museum is near the visitor center on a site leased from the Park Service. The museum partners with the Park Service and promotes the preservation of the area's Down East cultural heritage, including crafts, music, and history, exhibits and educational programs, artisan demonstrations, and special events.

There are no stores or restaurants on the islands, and visitors are advised to transport their own food, water, and supplies. Primitive tent camping is allowed, although there are no established tent campgrounds. Public responses submitted during initial scoping for this plan were generally in support of retaining the national seashore's natural and

scenic qualities while avoiding excessive commercial development or other actions that would diminish the seashore's rustic and primitive visitor experience. There is broad public consensus that the experience at Cape Lookout is, and should remain, qualitatively different from that offered on Cape Hatteras and other beach destinations that are perceived as being overly developed and/or having excessive tourist amenities.

Visitor crowding or congestion is another issue at the seashore, particularly in the vicinity of the lighthouse. Periodic crowding can arise when several ferries and/or private boats arrive at about the same time and unload many passengers at the single public dock. The new boardwalk and visitor orientation area near the lighthouse have helped alleviate some of the congestion, although effective dispersal of visitors from this location remains an NPS objective. In the future, the Park Service anticipates increased visitor numbers and use in the lighthouse area once rehabilitation of the lighthouse is complete and the structure is opened to the public on a daily basis. It is currently open to the public on four special open-house dates.

Visitors using commercial ferries generally receive inconsistent or inadequate orientation and interpretation before their arrival at the national seashore. This can be attributed to limited NPS oversight of commercial service operations and the logistical constraints associated with multiple ferry operators using different mainland departure points. Many visitors never stop at the Harkers Island Visitor Center before they depart, and there is limited NPS presence and orientation information available at the private concession docks. Novice visitors are often unprepared for their visit and unclear that they are entering a unit of the national park system that requires adherence to specific regulations and policies.

The National Park Service is preparing an *Off-Road Vehicle (ORV) Management Plan* for the

national seashore that will guide and support regulations for the management of off-road vehicles. As part of public scoping for the plan, a survey was conducted to obtain feedback from visitors regarding recreational activities, perceptions of acceptable visitor numbers, and opinions concerning ORV use.

The preliminary report of findings for the visitor use study indicated that most survey respondents identified recreational fishing as their primary activity at the national seashore. These respondents indicated that they are generally satisfied with their experiences; few felt crowded during their visit, or that the presence of others and/or vehicles had a negative impact on their experience. Most respondents also indicated that vehicles are necessary for their enjoyment of the national seashore (“CALO Visitor Use Study Preliminary Report”).

The survey data support the observation that for many visitors (and particularly recreational fishermen) ORV use is an integral component of their experience, providing them broader access to the shoreline of the national seashore than just the immediate areas of the Long Point and Great Island camps and other customary arrival points. For other visitors, the advantages provided by off-road vehicles to disperse from more congested activity areas could be offset by ORV noise and other associated impacts that diminish opportunities for a more tranquil experience. Although ORV use and other land transportation is provided under the alternatives presented in this *Commercial Services Plan*, specific NPS measures to manage ORV use or to determine the allowable number of vehicles at the national seashore will be deferred to the *Off-Road Vehicle (ORV) Management Plan* (in progress).

## CULTURAL RESOURCES

### CAPE LOOKOUT VILLAGE HISTORIC DISTRICT

#### Structures and Buildings

The Cape Lookout Village Historic District was listed on the National Register of Historic Places in June 2000. The national register nomination identified 27 contributing resources, 10 of which were previously listed on the national register as part of separate nominations for the historic Cape Lookout Lighthouse Station (listed in 1972) and U.S. Coast Guard Station (listed in 1989). The district's significance derives from being

a unique Outer Banks community that flourished as a fishing village and life-saving station from the 1870s to about 1920, and then endured as a resort for hardy vacationers until becoming part of the Cape Lookout National Seashore in 1966. (National Register nomination, Longleaf Historic Resources 2000, section 8, p.19)

For the most part, the district's historic structures retain integrity of location, design, setting, feeling, and association. This has occurred despite the cape's harsh environment, which requires repeated building maintenance, and a legacy of buildings undergoing adaptation for different functions. The condition of the buildings ranges from poor to good, with varying degrees of deterioration exhibited as a result of weathering and limited repairs and maintenance both prior to and since the final expiration of leases. In 1958, in keeping with the long tradition of cape structures being moved to meet changing functional needs and shifting shorelines, three government buildings (the 1887 Life-Saving Station, the 1907 Lighthouse Keeper's Quarters, and the 1924 Life-Saving Station Boat House) were relocated to their current sites near the central part of the district. Of the latter three

buildings, the Lighthouse Keeper's Quarters retains the greatest degree of interior and exterior integrity. As proposed by the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (2007), these structures would be relocated back to their original site locations.

The national register nomination identified the district's period of significance as spanning the years from 1857, when construction began on the lighthouse, to approximately 1950 when private home construction on the cape ceased following the state's acquisition of land for a proposed state park. All of the historic resources in the district are owned by the National Park Service.

The historic district's structures are generally clustered in three principal areas. Structures contributing to the district's significance include the following:

**Lighthouse Station Complex.** The complex includes the Cape Lookout Lighthouse (1857-59), a 163-foot-tall conical brick structure painted in a distinctive pattern of a black and white diagonal checkerboard. The lighthouse has long been seen as an icon reflective of the cape's colorful history and it continues to serve as a vital navigational aid. Near the lighthouse is the 1873 Keepers' Quarters, a two-story brick dwelling that the Park Service has rehabilitated as a museum with interpretive exhibits. A small concrete oil house and brick water storage cisterns are also included in the complex.

**Central Residential Area.** In addition to the three government buildings that were relocated to this area in the 1950s, this portion of the district includes 11 former private houses that exhibit vernacular, utilitarian wood-frame construction. The houses are collectively significant as a type adapted to the Outer Banks environment. As proposed by the

*Cape Lookout Village Historic Structures Reuse Implementation Plan* (2007), all contributing structures will be stabilized. Of these, selected structures would be used for overnight visitor stays under a concessions operation. More detailed descriptions of these properties can be found in appendix A.

**U.S. Coast Guard Station Complex.** The main station (1916–17) of the complex is a rectangular two-story frame building with Georgian Revival design elements. It served as living quarters and office space for the Coast Guard crew. The station has been used by a non-profit organization for environmental education programs and as a field school. Other contributing buildings include the galley (1917) and an equipment garage (1940).

**Circulation Network (late 19th century to the present).** The loosely connected system of dirt and concrete roads linking the lighthouse complex, cluster of dwellings, and former Coast Guard Station, is identified collectively as a contributing structure. Most of the roadways are of packed sand and range from wide sandy paths to well-graded roadbeds. The narrow dirt lane leading from the Coast Guard Station through the concentration of dwellings and on to Cape Lookout Bight is known as the “main road.” The “back road” (considered the oldest on the cape) extends the length of the cape behind the primary dunes. Several shorter access roads branch off from these primary roads to residences and other sites.

**Coast Guard Dock (ca. 1950).** The former Coast Guard dock, approximately 1,000 feet long, is constructed of creosote-treated wood pilings supporting heavy board decking.

**Noncontributing Building and Structures.** Altogether, the Cape Lookout Village Historic District national register nomination identifies 26 buildings and 4 structures as having lost historical integrity, and/or to having been constructed too recently to fall within the period of significance.

**Les and Sally Moore House and Store** (ca. 1951) — This one-story, five-bay-wide frame building has until recently accommodated environmental education programs. The national seashore will continue to use this building for environmental education programs offered by nonprofit organizations.

Other non-contributing properties include *Fishing Cottage No. 1* (1950s), which has been removed, and several other outbuildings and minor structures that are dispersed throughout the district (e.g., garages, sheds, docks).

### Cultural Landscape

The cultural landscape of the Cape Lookout Village Historic District is identified as a contributing component of the district’s national register significance, furthering the district’s overall integrity of setting, feeling, and association. The coastal environment of the Outer Banks has been dramatically shaped by prevailing winds, storms, tides, and the littoral drift of sand along the shorelines. These dynamic natural processes have strongly influenced patterns of cultural adaptation and settlement on the cape, which are reflected in the design, materials, and spatial organization of historic buildings and structures.

The “Cape Lookout Village Cultural Landscape Report” (Wiss, Janney et al. 2005) provides detailed cultural landscape descriptions, analyses, and treatment recommendations. In describing the cultural response to the cape’s natural resources and environment, the report notes that the Coast Guard Station (on the site of the original 1887 Life-Saving Station) and most of the houses within the Cape Lookout Village Historic District were sited to take advantage of the protection afforded by sand dunes and ridges and the presence of an unconfined freshwater aquifer. The 1859 lighthouse and its nearby 1812 predecessor (no longer extant) were sited on a prominent ridge to command the widest

possible view for sailing vessels seeking safe passage around the cape's hazardous shoals. Also, the road circulation system linking the Coast Guard Station on the south and the clustered central residential area and Light-house Station on the north was developed in large measure in response to the linear orientation of dunes and ridges.

Human activities at Cape Lookout during the period of historical significance consisted primarily of navigation and maritime services, commercial fishing, and private residential and recreational use. The first permanent structure on the cape was the 1812 lighthouse, which was replaced in 1859 by the current lighthouse. The Cape Lookout Life-Saving Station was established in 1887 to provide aid and rescue service for mariners in distress. Between about 1870 and 1910, the commercial viability of mullet fishing drew fishermen to the Core and Shackelford Banks during the summer and fall. By about 1900, many fishermen who formerly resided on nearby Shackelford Banks began to settle on Cape Lookout and established a village that at one time numbered about 80 people. The subsistence of the village community was supplemented by livestock grazing.

With the advent of motorboats, fishermen began to resettle on the mainland or at Harkers Island, and the village on Cape Lookout was nearly abandoned by 1920. About 30 or 40 houses were moved from Cape Lookout to Harkers Island at this time. However, seasonal recreational use of the cape subsequently gained popularity, and several of the remaining cottages were reused by recreational fishermen and other vacationers. Cape Lookout was used as part of the U. S. coastal defenses during World Wars I and II. Following the establishment of the national seashore in 1966, NPS objectives for preserving and enhancing resource conditions and providing for compatible recreational activities have influenced patterns of use and the landscape of the cape. Although fishing continues primarily as a recreational pursuit, livestock

grazing no longer occurs, and the Coast Guard Station was decommissioned in 1982.

Other than the surviving features of the built environment, the overall landscape bears little overt evidence of human manipulation. However, some cultural activities have had a marked impact. In particular, regular dredging of navigational channels through Barden Inlet following the original opening of the inlet by a hurricane in 1933 and constructing jetties on the western (sound) side of the cape (ca. 1914 and 1945) have altered and contributed to the natural shoreline dynamics of sand deposition and erosion. The shoreline between the lighthouse and the bight has substantially eroded since the mid 20th century. Recently, a project was undertaken to protect the lighthouse and its associated resources from encroaching erosional impacts.

Based on historic photos and other evidence, the residential area in the historic district had considerably less vegetation during the period of significance. A sense of this open landscape is still evident around the 1907 Keeper's Quarters, Baker-Holderness house (Casablanca), and the Seifert-Davis house (Coca-Cola House). Within approximately the last 25 years, the growth of pines, myrtle, cedars, and other small trees and shrubs has obscured formerly open vistas and reduced the visual connection between most of the district's buildings and structures. The dense vegetation also presents an elevated fire hazard. Historical evidence suggests that the open character of the landscape during the late 19th and first part of the 20th century may itself be largely the result of unrestricted livestock grazing and clearing because large stands of trees are known to have once existed on the Outer Banks (NPS 2005b, Chapter 4, pgs.8-9).

## **PORTSMOUTH VILLAGE HISTORIC DISTRICT**

Portsmouth was established in the mid 18th century by an act of the North Carolina

Assembly. By 1770 the thriving port had become one of the largest settlements on the Outer Banks. Portsmouth benefited from its location on the southern point of Ocracoke Inlet as a “lightering” or trans-shipment stop where large sea-going ships, unable to navigate through the shallow inlet, unloaded their cargo. The cargo was then stored in warehouses for later reloading or was transferred to shallow-draft boats that completed the transport across Pamlico Sound to inland ports. The process was repeated for cargoes from the North Carolina mainland headed for outgoing or ocean-bound vessels. The critical lightering business was supported by Portsmouth’s skilled boat pilots who guided ships through the treacherous shoals of the inlet. By 1842, more than 1,400 vessels and two-thirds of North Carolina exports passed through Ocracoke Inlet, and Portsmouth’s economic future seemed secure (NPS n.d.b).

In 1846, however, a hurricane opened a new and deeper inlet to the north near Cape Hatteras at a time when the Ocracoke Inlet was becoming increasingly shallow and difficult to navigate. Ship traffic consequently shifted north to the new inlet. During the Civil War many of Portsmouth’s residents left for the mainland as Union troops advanced down the Outer Banks, and many of these former residents never returned. The commercial shipping industry also faced growing competition from mainland railroads, which further contributed to Portsmouth’s decline. The U.S. Life-Saving Service established a station at Portsmouth in 1894 for the rescue of mariners in distress, and a few of the local residents were employed at the station. Commercial fishing eventually replaced shipping as the economic focus of the community, but Portsmouth never regained its former level of prosperity.

Despite its economic setbacks and dwindling population, Portsmouth, along with other Outer Banks communities, gained increasing popularity in the late 19th century as a summer vacation destination. By the 1880s chartered steamer excursions brought large

groups of sightseers and vacationers there for picnicking, swimming, fishing, and other activities. The recreational trend continued well into the 20th century, and several of the former residences were purchased for family vacation homes or hunting / fishing bases before establishment of the national seashore. Portsmouth’s last permanent residents left in the early 1970s, although the remaining houses were used as vacation homes under one-year special use permits, 25-year leases, or life estates granted by the National Park Service. Five or six historic leases are maintained by individuals who continue to reside seasonally in some of the village houses. NPS personnel and volunteers also periodically occupy selected dwellings.

### Structures and Buildings

The Portsmouth Village Historic District was listed on the national register in 1978 (NPS 1977). Although more than 100 buildings once stood in the village at its peak in the mid 19th century, over the years many of the buildings were destroyed by storms or moved to the mainland. The national register nomination describes the village as consisting of about 25 complexes of one or more buildings dating primarily from the late 19th and early 20th centuries. The wood-frame buildings exhibit a range of vernacular architectural styles that were adapted to the Outer Banks environment. Among the adaptations to the maritime climate and frequent storms were broad porches, low-sloped roofs, and placement of the structures on brick piers or wood posts to elevate them above grade.

The building clusters are interconnected by a network of meandering lanes, but dense vegetation and topographic features currently separate the clusters to impart a sense of spatial isolation. Currently, the visitor center (Dixon/ Salter House), the Methodist Church, school, post office / general store, and the life-saving station are open to the public. The Friends of Portsmouth Island, in cooperation with the national seashore, sponsor an old-

fashioned homecoming on alternating years that is held at the Methodist Church. Brief descriptions of the historic district's contributing buildings, can be found in appendix A.

Other historic structures in the district include cisterns and water boxes (constructed variously of brick, wood and concrete) that were used to collect rainwater for drinking and other purposes. Several family and community cemeteries and gravesites are located in the district including the Babb-Dixon, Grace, Community, Keller-Styron and Portsmouth cemeteries. Headstones and footstones at the gravesites, some dating from the early 19th century, are in various states of disrepair. Although historic maps depict docks and bridges within the district, none survive from the historic period.

### **Cultural Landscape**

A draft "Portsmouth Village Cultural Landscape Report" (Wiss, Janney et al. 2007) analyzes the defining characteristics and features contributing to Portsmouth's cultural landscape. Expanding on the earlier national register nomination for the district, the report recommends that Portsmouth's period of significance begin in 1753 with the community's establishment, and extend to 1971 when the last permanent residents left the island. The current cultural landscape of the historic district most closely reflects its appearance as it evolved during the first half of the 20th century, with a limited number of structures and other features surviving from the 19th century. There are no structures or obvious landscape features from the 18th century to reflect Portsmouth's initial period of development, although archeological resources from these and other periods of community development are suspected to exist at former building sites and activity areas. Historic maps and other evidence document many of the now-missing structures and sites such as residential and commercial buildings, a fish processing

factory, the "academy" (schoolhouse), U.S. Marine Hospital, and other properties.

Portsmouth Village occupies a low-lying area (about 8 feet above mean sea level) and is characterized by marshes, small hammocks, and level areas. Three tidal creeks (Doctor's Creek, Coast Guard Creek, and Warren Creek) cross the area. Although the Park Service has removed a considerable amount of woody vegetation from the district, the vegetation is currently much denser than it was during earlier periods of habitation when free-ranging livestock, tree cutting for firewood and building materials, and hurricanes contributed to a more open landscape. Throughout its history, Portsmouth's inhabitants have adapted to the shifting sands of the island and harsh Atlantic storms by moving their settlement closer to the more protected center of the island, and by siting buildings and other development on elevated hammocks.

The Old Straight Road (leading south from Haulover Point) and the Village Road survive from the period of significance as the two primary circulation routes through the village. Other secondary roads lead to individual houses, cemeteries, and other properties. Several of the historic roads have been obliterated or have become overgrown with vegetation.

Although the Portsmouth Village Historic District lacks overall integrity from the 18th and 19th centuries, cultural features primarily from the early to mid-20th century contribute to the district's significance.

The strong connections between the siting of buildings and structures and natural features and processes, historic use of materials, and sense of community dating from the early twentieth century . . . continue to be expressed in the surviving fabric of the historic district. (Wiss, Janney, et al. 2007)

## NATURAL RESOURCES

The barrier islands comprising Cape Lookout National Seashore extend from Ocracoke Inlet to Beaufort Inlet. They are adjacent to the islands of Cape Hatteras National Seashore on the northeast and Bogue Banks on the southeast. All of these barrier islands are known as the Outer Banks of North Carolina. Of the 308 miles of barrier island ocean shoreline in North Carolina, Cape Lookout National Seashore represents 87% of the miles in public ownership that are without road access or are roadless.

The islands in the national seashore are some of the few remaining barrier islands that do not have a bridge connecting it to the mainland. The width of the islands ranges from 600 feet to 1.75 miles. Except for the highest dunes at Cape Lookout Point and Shackleford Banks, all of the barrier islands in the national seashore are within the 100-year floodplain and the coastal high hazard area.

Barrier islands are highly ephemeral in nature. The ocean is the dominant force of change on these islands, and the forces of wind and wave action are constantly altering the landscape. The landscape on the national seashore is composed of low sand dunes that generally are not higher than 10 feet. Strips of grasslands grow behind dunes. Shrub thickets and a few hammocks are scattered along the length of the islands. There is an extensive area of salt marsh on the sound side of the seashore. Sand movement changes the appearance of the seashore by sometimes accreting but more often eroding the shoreline. The predominantly southwest littoral (along-the-shore) currents, daily wave action, high waves, and wind during storms are constantly moving the sand. Over time, the Core Banks have moved south and toward the mainland, more than 4 miles landward in the last 7,000 years. Landward migration is primarily driven by winds, tidal currents through inlets, and storm overwash. During

storm surges waves remove sand from the ocean beach and deposit it on the sound side in fan-shaped deltas. This process is known as overwash. The effect is compounded if there is an unusually high tide. Small islands such as the Core Banks are subject to frequent overwash. Wind transport is only indirectly responsible for turning over barrier islands, but the direction of the prevailing winds does affect dune formation. The prevailing winds along Core Banks run parallel to the shoreline and produce low dune fields that are more easily penetrated by overwash. On Shackleford Bank, the prevailing winds are generally perpendicular to the shoreline, resulting in high dunes.

Overwash of the foredunes caused by storm surges transports a large amount of sand. The sand deposited on the sound side of the island creates overwash fans or terraces. Sometimes the waves and their deposits extend across the island to the sound side. This sand movement plays an important role in marsh formation.

### WILDLIFE

A wide variety of terrestrial species are supported by the diverse habitats at Cape Lookout National Seashore. Birds are the most numerous inhabitants, with more than 275 identified species that use the national seashore for resting, nesting and feeding, and as a wintering or migratory rest stop. The national seashore has been designated a Globally Important Bird Area by the American Bird Conservancy. As development along the Atlantic coastline has increased and fragmented habitat in other areas, Cape Lookout, as part of the Atlantic Flyway, has become an important stopover point for migrating birds.

Small native mammal species found throughout the national seashore include marsh rice rats, river otters, and raccoons. Shackleford

Banks also has eastern mole, marsh rabbit, and eastern cottontail. Both the South and North Core Banks are home to the least shrew. South Core Banks also supports the northern short-tailed shrew, and the North Core Banks supports the eastern cottontail. Other resident species include amphibians and reptiles. Tree frogs and Fowlers toads are found in the vicinity of fresh water; diamond-back terrapins prefer the salt marshes, and the five-lined race runner lizard and black racer snakes prefer the grasslands. A wide variety of invertebrates are found in the ocean, inlets, sounds, moist sands of sand flats, island spits, the intertidal zone, and the wrack line (drift line).

Nonnative mammal species include the nutria, house cat, house mouse, horse, and the Norway rat. Ring-necked pheasant, an introduced species, can be found in some shrub thickets. The only large animals present in the national seashore are the nonnative feral horses on Shackleford Banks. There are 110–130 horses on the island, which are protected and maintained according to an amendment to the national seashore’s enabling legislation (NPS 2004b). No actions proposed under this plan would impact the horses on Shackleford Banks or management of the herd; for this reason there will be no further analysis of the horses under this plan.

Hunting and fishing at the national seashore would continue to be governed by state regulations. No actions under this plan would change current management of these activities by individuals or guide services, and there would be no new impacts on target species under this plan. For this reason hunting and fishing will not be further analyzed under this plan.

Recreational activities at the national seashore have adversely impacted wildlife. These impacts include habitat modification and disturbance of important life activities including breeding activities. Recreational visits to the national seashore are highly seasonal and greatest during the summer, followed by spring and fall. Summer also corresponds to breeding season for wildlife at the seashore. Recreational pressures on birds during breeding season have caused a decline in reproductive success (NPS 2006a).

Some, although not all, wildlife on the national seashore tend to avoid the primary activity points at Cape Lookout — Great Island, Long Point, Portsmouth, along transportation routes, along established road corridors, and along the beaches open to vehicular traffic (particularly during periods of heavy use). Of the wildlife species that do reside in or near activity points, some are scavengers looking for food.

## SOCIOECONOMIC ENVIRONMENT

### INTRODUCTION

The national seashore is entirely within Carteret County, North Carolina, and almost all of the public access to the seashore passes through the county. It is expected that most of the economic activity associated with visitors coming to the seashore would occur either at the visitors' home communities in preparation for their visits or somewhere near or in Carteret County on the way to the seashore. Because of this, the county is considered the affected environment for socioeconomic analysis for this plan (Bureau of Reclamation 2007a).

### DEMOGRAPHICS

Demographic data provide insights into the socioeconomic condition of the local area. In 2000, North Carolina had a population of 8,047,313 and ranked 11th in the nation. Carteret County is one of 100 counties in North Carolina, and its population of 59,383 ranked it 41st in the state. Although the permanent resident population is about 60,000, the transient population can grow to several times the local resident population during the summer tourist season. The communities that are closest to the national seashore and through which visitors pass are relatively small (Davis Township, for example, has about 400 residents, and Beaufort Township has about 8,000). Morehead Township has the largest population of any town near the national seashore at nearly 24,000 persons (see table 5).

From 1990 to 2000, Carteret County had a 13.0% increase in population (about 7,000 new residents) and kept pace with the national growth rate of 13.2%. Its growth, however, was much less than the state average of 21.4%. Although Davis Township lost about 10% of its population between 1990 and 2000, Straits

Township and Morehead City each gained 27% during the 1990s.

Morehead Township contained 40% of the county's population, and combined with just three other western townships (White Oak, Newport, and Beaufort) accounted for 84% of Carteret County's population in 2000. These four townships also provided 85% of the jobs in the county. The eastern part of the county is relatively sparsely populated and has a smaller available workforce. Overall the county had an unemployment rate of 5.0%. At the same time (2000), the North Carolina unemployment rate was 5.3% and the national average was 5.8%. Two townships had very high rates of unemployment — Merrimon (12.8%) and Sea Level (34.5%). With a small available workforce, a relatively few number of unemployed persons can register a high rate of unemployment. Most of the other townships were below the state and national rates.

The median household income (half of the total amount is below the income amount and half is above) for North Carolina in 2000 was \$39,184 compared to the national average of \$41,994. For Carteret County, the median household income was \$38,344 (98% of the state average and 91% of the national average). The township median incomes range from a little more than \$17,000 to more than \$50,000. These are the two extremes and both are in townships with relatively small workforces. The high value could represent a high-paying industry being located in a township and the low value could be an example of a township without any such employer. The 2000 per capita income (total dollar amount divided by the total number of workers) for Carteret County was \$21,260. This value was nearly 105% of the North Carolina average of \$20,307, and it was 98.5% of the national average of \$21,587. Per capita incomes also varied from township to township. The low was \$10,705, and the high was \$24,606. This

**TABLE 5: DEMOGRAPHIC DATA BY TOWNSHIP, 2000**

<b>Township</b>	<b>Population</b>	<b># in Civilian Labor Force</b>	<b># Employed</b>	<b>Unemployment Rate (%)</b>	<b>Median Household Income</b>	<b>Per Capita Income</b>	<b>% of Population Living below the Poverty Level</b>
Atlantic	817	311	296	4.8%	\$26,550	\$17,374	23.1%
Beaufort	7,665	3,961	3,686	5.5	35,048	20,322	10.8
Cedar Island	324	180	180	0.0	49,063	18,418	2.5
Davis	412	195	191	2.1	45,833	19,929	4.7
Harkers Island	1,525	662	643	2.9	33,125	19,790	15.5
Harlow	1,272	641	598	6.7	40,238	19,667	10.1
Marshallberg	528	190	179	5.8	31,944	17,980	16.0
Merrimon	657	227	231	12.8	38,068	24,238	16.0
Morehead	23,748	11,692	10,999	5.9	39,426	22,939	19.0
Newport	8,326	4,196	3,901	3.2	36,956	15,880	10.8
Portsmouth Island	4	7	7	0.0	43,750	10,750	0.0
Sea Level	461	119	78	34.5	36,071	17,579	26.6
Smyrna	679	464	456	1.7	50,469	17,686	10.3
Stacy	206	123	123	0.0	17,260	16,303	5.0
Straits	2,686	1,171	1,111	5.1	30,852	18,792	12.7
White Oak	10,073	4,579	4,431	3.2%	\$43,687	\$24,606	7.5%
Carteret County	59,383	28,718	27,110	5.0%	\$38,344	\$21,260	10.7%

Source: U.S. Census Bureau 2000a and 2000b

low is not considered too significant because it occurs in Portsmouth Island Township, which has a population of only four. Of more significance is a relatively high per capita income in Morehead Township, which is paired with a 19% rate of people living below the poverty level.

The number of people living below the poverty level in Carteret County is 10.7% lower than the state rate of 12.3% and the national rate of 12.4%, it is still a major social concern when one out of ten citizens is living in poverty in a community. At the township level the rates vary from quite low to very high — for example, more than one out of four people live below the poverty level in Sea Level Township. In some of the smaller townships, a couple of dozen jobs either lost or created can make a substantial difference to the local economy.

### **EMPLOYMENT BY MAJOR INDUSTRIES**

The 2000 Census identified the major sources of employment in Carteret County as the educational, health, and social services occupations, which provided 18.0% (4,881 jobs) of the full- and part-time jobs in Carteret County in 2000 (see appendix B). Retail trade was the next largest sector at 12.9% (3,495 jobs). Construction provided over 3,000 jobs (11.2%), and public administration accounted for more than 2,800 jobs (10.4%). The arts, entertainment, recreation, accommodation, and food services sector combined to produce more than 2,770 jobs (10.2%). This grouping is often referred to as the tourism industry. According to the 2000 Census, the tourism industry in Carteret County ranked fifth out of 13 industry sectors.

Although tourism is an important industry in Carteret County, many tourism-related jobs are only seasonal, part time, or entry level positions that do not pay particularly well. The Carteret County Chamber of Commerce

recently stated that the local tourism industry throughout Carteret County employed more than 3,270 people and provided a payroll of nearly \$51 million. On an annual basis, this would be a salary of approximately \$15,600. Although this may not be a particularly high annual salary, it might be relatively good pay for a part-time or seasonal job for a student or someone supplementing their primary income.

### **ECONOMIC IMPACT OF CAPE LOOKOUT NATIONAL SEASHORE**

Cape Lookout National Seashore is an important attraction with national significance within the county and draws visitors from throughout the county. The national seashore provides tourists maximum exposure to the county's businesses.

Cape Lookout National Seashore hosted more than 400,000 nonlocal recreation visits (i. e., visitors from areas that are not immediately adjacent to the national seashore boundary) in 2006 (NPS data). These visitors traveled through Carteret County, and most are expected to have purchased food, gas, lodging, souvenirs, or other goods and services along the way to and from the national seashore. The businesses and people who own and work in these establishments in the many towns along the way to the national seashore benefit from the visitors and their spending as they travel to the national seashore.

Cape Lookout National Seashore has an impact on the local socioeconomic environment in a number of ways: direct employment, direct spending, commercial services, payments-in-lieu-of-taxes, and visitor spending.

### Effects of National Seashore Operations and Concession Activities

The national seashore's recent annual budgets are displayed in table 6. Much of these funds is allocated for staff labor and is spent locally as stated above. Much of the rest of these funds go for other goods and services, most of which are procured within Carteret County.

NPS employees contribute to the local and county economy by living in the area and buying goods and services from local businesses. Between 2000 and 2006, NPS staffing levels have ranged from 19 to 20 full-time-equivalent (FTE) positions, five to six of which are seasonal or temporary positions. With a small permanent staff and just a few seasonal employees to fulfill the NPS mission at the national seashore, consolidation of the concession contracts / commercial use authorizations into a manageable number to lessen the workload is a desirable goal. Concession contracts and commercial use authorizations are used to provide necessary and appropriate goods and services to the visiting public to make their visits more enjoyable and enhance visitor comfort and safety in an expedient and economical manner while protecting national seashore resources for future generations. An associated benefit is that some seasonal and temporary business

and employment opportunities are also realized.

### Payments in Lieu of Taxes

The Payments in Lieu of Taxes (PILT) program makes payments to local governments to help offset losses in property taxes due to nontaxable federal lands within their boundaries. PILT funds help fund local government services like police and fire protection, school and road construction, etc. During fiscal year 2006, Carteret County received more than \$93,000 covering 9,603 acres of NPS lands, 56,828 acres of U.S. Forest Service lands, and 8 acres of U.S. Army Corps of Engineers lands within the county. The NPS lands constitute about 16% of the total federal land in the county.

### Visitor Expenditures

An economic analysis model adopted by the National Park Service was used to estimate the economic impact of Cape Lookout National Seashore on the local and regional economy in terms of sales, income, and jobs attributable to visitor use at the national seashore in 2003. The average daily amount spent by visitor

**TABLE 6: NATIONAL SEASHORE BUDGETS**

Fiscal Year	Resource Preservation, Maintenance and Management	Visitor Services	National Seashore Administration	Long Term Parking	Amount
2006	\$1,045,500	\$282,300	\$382,200	\$55,000	\$1,765,000
2005	936,100	240,200	354,700	54,000	1,585,000
2004	911,800	242,100	337,100	45,500	1,536,500
2003	934,600	231,800	321,600	55,500	1,543,500
2002	846,800	213,600	311,600	53,500	1,425,500
2001	863,700	152,700	325,600	50,000	1,392,000
2000	\$475,100	\$536,900	\$304,000	\$50,000	\$1,366,000

Source: National Park Service

was estimated at \$77.00 (see table 7). The model estimated that visitors to the national seashore spent approximately \$30.75 million in 2003.

As illustrated in table 8, the direct effects of this spending resulted in \$25.32 million in sales and \$8.56 million in personal income (wages and salaries), supported 723 jobs, and \$12.85 million in value added. Secondary effects occur as money from sales and income recirculates within the local area adding

additional amounts to sales, income, jobs, and value added. The secondary effects were an additional \$8.33 million in sales of goods and services, \$2.8 million in personal income, 127 jobs, and \$5.17 million in value added.

The total effects of national seashore visitor spending were \$33.65 million in sales, \$11.36 million in personal income, 850 jobs, and \$18.02 million in value added (see table 8).

**TABLE 7: VISITS AND SPENDING BY VISITOR SEGMENT (2003)**

	Local Day Trips	Non-local Day Trips	Hotel	Camp	Total
Recreation Visits	139,165	278,330	214,755	72,231	704,480
Segment Shares in Recreational Visits	20%	40%	30%	10%	100%
Party Days	55,740	111,480	172,027	56,136	397,998
Average Spending Per Party Day	\$ 27	\$ 39	\$ 123	\$ 64	\$ 77
Total Spending (millions)	\$ 1.50	\$ 4.35	<b>\$ 21.24</b>	<b>\$ 3.66</b>	<b>\$30.75</b>

Source: National Park Service and Michigan State University

**TABLE 8: ECONOMIC IMPACTS OF VISITOR SPENDING BY SECTOR (2003)**

Sectors	Sales (Millions)	Personal Incomes (Millions)	Jobs	Value Added (Millions)
<u>Direct Effects</u>				
Motel, Hotel, B&B and Cabins	\$10.03	\$2.91	257	\$4.42
Campsites	0.86	0.25	22	0.38
Restaurants and Bars	6.79	2.14	212	2.98
Admissions and Fees	2.98	1.02	88	1.68
Retail	3.29	1.68	116	2.62
Others	1.38	0.56	29	0.77
<b>Total Direct Effects</b>	<b>\$25.32</b>	<b>\$8.56</b>	<b>723</b>	<b>\$12.85</b>
Secondary effects	8.33	2.80	127	5.17
<b>Total Effects</b>	<b>\$33.65</b>	<b>\$11.36</b>	<b>850</b>	<b>\$18.02</b>

Source: National Park Service and Michigan State University

## MAINLAND PROPERTY VALUES

Land prices in communities and other areas surrounding Cape Lookout National Seashore have rapidly escalated in recent years, particularly along the waterfront. Developers have begun changing the land use and building high rise structures. There is a potential that ferry services to the national seashore could be affected because of land prices — businesses could opt to sell out for development, and ferry departure sites could become limited. (See table 9 on the next page for current asking prices for building lots in Beaufort, Harkers Island, Morehead City, Cedar Island and Atlantic.)

## COMMERCIAL SERVICES

A feasibility study regarding commercial services for Cape Lookout National Seashore was prepared for the Park Service's Southeast Region by Dornbusch Associates of Berkeley, California (Dornbusch 2007).

This study identified that there are currently two concession contracts for lodging, ferry service, and gas sales at Long Point and Great Island and 12 commercial use authorizations as follows:

- four commercial use authorizations for passenger ferry from Harkers Island to Cape Lookout and Shackleford Banks
- three commercial use authorizations for passenger ferry from Beaufort to Shackleford Banks,
- one commercial use authorization for passenger ferry and beach tour from Ocracoke to Portsmouth
- one commercial use authorization for kayak rental

- three commercial use authorizations for beach tours at the Cape Lookout Lighthouse area. (Dornbusch 2007)

These enterprises operate from a variety of locations on their own schedules.

In this study the contractor was looking at the financial feasibility of providing various commercial services to visitors to the national seashore. The main recommendation from the study was that for private sector enterprises to be financially viable, services should be grouped by geographic location using a few concession contracts and a number of commercial use authorizations. This would help the National Park Service to succeed in its mission to preserve national seashore resources and provide the necessary goods and services to the visiting public (and also significantly improve the administration of the commercial services program).

According to the study, a single concession contract could provide for a variety of services to be offered by the contractor at one location. Thus the National Park Service would have fewer concession instruments to administer and business managers to communicate with and would receive fair and reasonable franchise fees. Competitively bid concession contracts would also result in operating and maintenance plans that would specify concessioner requirements and more consistent data and financial reporting.

In turn, contractors might save on labor costs or achieve some economies of scale by offering a variety of services from one location. Concession contracts would be long term, up to 10 years, so contractors would be able to do long-term planning and be able to amortize their major investments, such as ferry boats.

**TABLE 9: ASKING PRICES FOR BUILDING LOTS IN BEAUFORT, CEDAR ISLAND, HARKERS ISLAND, AND MOREHEAD CITY, JULY/AUGUST 2007**

LOCATION	WATER	AREA IN ACRES	PRICE
Atlantic	Waterfront	0.25	\$ 349,000
Atlantic	Waterfront	0.5	\$ 389,000
Atlantic	Waterfront	1.15	\$ 739,000
Beaufort	Waterfront	0.33	\$ 700,000
Beaufort	Waterfront	0.61	\$ 1,000,000
Cedar Island*	Waterfront	0.54	\$ 290,000
Cedar Island*	Waterfront	0.96	\$ 325,000
Cedar Island*	Waterfront	2.08	\$ 299,000
Cedar Island*	Waterfront	1.36	\$ 129,000
Cedar Island*	Waterfront	2.05	\$ 495,000
Harkers Island	Waterfront	0.50	\$ 400,000
Harkers Island	Waterfront	0.50	\$ 650,000
Morehead City	Deep water**	0.50	\$ 1,500,000
Morehead City	4 feet ***	0.50	\$ 550,000
Morehead City	4 feet ***	0.50	\$ 995,000

\* Single-family residential lots on waterfront

\*\*Deep water allows for mooring larger boats.

\*\* 4 feet allows for mooring smaller boats only

\*\*\*Allows for mooring smaller boats only

Source: At Waves Edge Coastal Edge Real Estate & Investment, LLC 252-808-2903

## NPS OPERATIONS AND FACILITIES

### FACILITIES AND MAINTENANCE

Facilities at the national seashore used or impacted by commercial services are as follows:

#### **Harkers Island**

visitor center and administrative building  
administrative boat basin and docks  
picnic area  
parking

#### **Cape Lookout Village Historic District**

Coast Guard facilities including the  
historic dock and facilities used for  
environmental education programs  
Cape Lookout Lighthouse  
Keeper's Quarters  
visitor orientation area  
8-10 contributing historic structures that  
would be available for overnight use

#### **Great Island**

ferry dock  
concession "office" building  
25 cabins available for overnight use

#### **Long Point**

dock  
concession "office" building  
20 cabins available for overnight use

#### **Portsmouth**

16 contributing historic structures  
two docks

#### **Other Facilities**

Les and Sally Moore House used as an  
environmental education facility  
gun club

The National Park Service owns and maintains all facilities and infrastructure at the national seashore (i.e., docks, roads, and structures) used by commercial service providers and visitors. All materials and

equipment must be transported by boat. The harsh maritime climate (including salt spray and storms) and heavy visitor use have an adverse impact on facilities and infrastructure at the national seashore. Currently, the type of commercial service agreements used to authorize ferry service to the seashore do not provide an economic return to the national seashore commensurate with the economic value of the facilities or the costs and impacts associated with their use. Under this plan not all of the listed facilities would be used by commercial service operations. For example, the visitor center and headquarters buildings would not be used to provide commercial services but would likely receive additional use under the action alternatives because the commercial ferry operations on Harkers Island would depart from the boat basin at the visitor center.

The Les and Sally Moore House as well as the main Coast Guard building at the Coast Guard Station would continue to be used for environmental education purposes. Currently the Coast Guard facility is used by nonprofit organizations. The national seashore would continue to use these types of agreements to make these facilities available for environmental education programs. Under alternative C, the Gun Club on South Core Banks would be rehabilitated as resources allow and could be used to accommodate large group activities.

Vehicle access, including all-terrain vehicles (ATVs), is permitted with some restrictions on designated roads on the ocean side of North and South Core Banks. For visitors who do not have their own vehicle, limited land transportation near the lighthouse is available; however, tickets must be purchased before arriving at the national seashore. Limited land transportation is also available from the concessioner at Long Point and Great Island, and reservations are required. The roads on

North and South Core Banks are not improved. There is no vehicle access on Shackleford Banks, except for NPS authorized vehicles performing NPS management functions. All roads on the Core Banks are maintained by the National Park Service.

The National Park Service is conducting an evaluation of all facilities at the national seashore to determine if these facilities meet appropriate accessibility standards. Facilities that do not meet applicable standards would be modified to meet these standards where appropriate. The National Park Service will conduct a similar evaluation for all commercial service providers. Providers would also be required to modify their facilities and equipment as necessary to meet accessibility standards as well as all NPS standards, policies, and other applicable laws. If it becomes necessary to construct new docks to accommodate visitors with limited mobility or to accommodate an increase in visitation, environmental compliance activities would be completed as appropriate.

## STAFFING

Currently, tasks associated with management of commercial service operations account for a 0.5 full-time-equivalent employee (FTE employee, that is the equivalent of half an employee), and the duties are shared among several staff members. There are the equivalent of 3.7 employees in interpretation, 2.6 employees in law enforcement, 3.2 employees in resource management, and 3.8 employees in maintenance. Additional seasonal interpretive, law enforcement, resource management, and maintenance staff are hired each year.

Staff time will continue to be necessary for ongoing monitoring and management of cultural and natural resources at the national seashore. Although visitor use is concentrated near the activity centers at the national seashore — Harkers Island, Cape Lookout and

the Lighthouse, Great Island, Long Point, Portsmouth, and the south end of Shackleford Banks — resource monitoring and enforcement actions occur throughout the national seashore. Management actions include closing areas of the national seashore to protect nesting birds or sea turtles during breeding season.

## MANAGEMENT OF COMMERCIAL SERVICES

There are two concession contracts for lodging, ferry service, and gas sales at Long Point and Great Island, as well as 12 commercial use authorizations, although some are inactive, as follows:

- four for passenger ferries from Harkers Island to Cape Lookout and Shackleford Banks
- three for passenger ferries from Beaufort to Shackleford Banks
- one for passenger ferry and beach tour from Ocracoke to Portsmouth
- one for kayak rental
- three for beach tours at Cape Lookout Lighthouse area, (only one is in use)

All commercial service providers must adhere to applicable federal and state laws such as noise and emission standards (for ferries and other forms of transportation) and health and safety requirements. Most visitors access the national seashore via a commercial ferry operation. These operators must also comply with Coast Guard licensing and operational requirements. Commercial service providers are responsible for knowing applicable requirements and maintaining necessary licenses and permits.

Management of commercial services is a shared responsibility across several staff positions. This requires additional coordination among staff, which takes time away from other assigned tasks. In addition, staff must coordinate with, monitor, and collect data

from many individual commercial service providers. Monitoring is time-consuming because there is little uniformity in the data collected from each provider. Currently, there is no system in place to audit the facilities or performance of service providers.

The facilities available from commercial service operators (e.g., restrooms) may not provide a consistent level of service across all operators. Orientation information received by ferry passengers or users of other commercial services may not be of consistent quality, and some visitors may not be aware they are about to enter a unit of the national park system or that the commercial service has been authorized by the National Park Service.

reasonable fee to be used, at a minimum to recover associated management and administrative costs. Currently, payments associated with the commercial use authorizations at the national seashore are not commensurate with the economic value of the facilities used by commercial use operators or the costs and impacts associated with their use. Concession contracts require the payment of a franchise fee, a specified percentage of the concessioner's annual gross receipts, to provide a fair economic return to the government. Eighty percent of the fees derived from concessions contracts are retained at the national seashore for visitor service and resource protection projects, and the remaining 20% is distributed by the NPS Concessions Program to support park, regional, and national initiatives.

## **REVENUE**

Commercial use authorizations provide for payment to the National Park Service of a



**CHAPTER 4:  
ENVIRONMENTAL  
CONSEQUENCES**





## METHODOLOGY FOR ASSESSING IMPACTS

### INTRODUCTION

Potential impacts (direct, indirect, and cumulative effects) are described in terms of type (are the effects beneficial or adverse?), context (are the effects site-specific, local, or even regional?), duration (are the effects short term, i.e. occurring during the period of construction or lasting less than one year; long-term, i.e., lasting longer than one year; or permanent?) and intensity (is the degree or severity of effects negligible, minor, moderate, or major). Because definitions of intensity (negligible, minor, moderate, or major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed in this environmental assessment / assessment of effect.

### CUMULATIVE IMPACTS

The Council on Environmental Quality's regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 *et seq.*), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7).

Cumulative impacts are evaluated for all alternatives, including the no-action alternative.

Cumulative impacts were determined by combining the impacts of each alternative with other past, present, and reasonably

foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects at Cape Lookout National Seashore and, if applicable, the surrounding region. These projects include the following:

- implementation of the NPS *Cape Lookout Village Historic Structures Reuse Implementation Plan* (2007), which calls for rehabilitation of selected buildings within the Cape Lookout Village Historic District for NPS administrative and interpretive purposes and for public overnight lodging under a concessions operation. Essential utilities would be constructed including water and electrical lines and a central wastewater treatment system. Selective vegetation clearing would be undertaken within the district. Three structures (the 1887 Life-Saving Station, the 1924 Life-Saving Station Boat House, and the 1907 Lighthouse Keeper's Quarters) would be relocated to their original site locations.
- the planned restoration/ rehabilitation of the Cape Lookout Lighthouse Station and planned opening of the lighthouse for daily visitation
- protection measures for the lighthouse and associated historic structures (completed in the spring of 2006)
- some recommendations from the draft "Cape Lookout Village Cultural Landscape Report" (Wiss, Janney et al. 2005) were included in the actions presented in the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007) — selective vegetation clearing, restoration and rehabilitation of historic buildings, and relocation of selected historic buildings to original site locations. Other actions and treatments recommended in the report could be considered in the future, such as

reestablishing historic road alignments and patterns of circulation, constructing new pathways and boardwalks, and replacing missing structures in the lighthouse and coast guard areas.

- visitor use improvements in the lighthouse vicinity as described in the *Cape Lookout Visitor Orientation Area Development Concept Plan / Environmental Assessment* (NPS 2005) — a new comfort station and visitor contact station, the placement of new water line, construction of a 75-car public parking area, and construction of new sections of boardwalk
- The draft “Portsmouth Village Cultural Landscape Report” (Wiss, Janney et al. 2007) presents treatment recommendations for preserving and enhancing the integrity of the Portsmouth Village Historic District and its cultural landscape. Recommendations are provided for the long-term treatment and preservation of surviving historic buildings and structures, road corridors, small-scale features, and other elements. Vegetation and natural resource management recommendations include

the removal of non-contributing woodland areas and possible reestablishment of some historic vegetation communities.

- management of threatened and endangered species through the *Interim Protected Species Management Plan*.
- Visitors to the national seashore may transport off-road vehicles (ORVs) to the seashore via concession-operated ferry service. These visitors use their vehicles for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles are transported by ferry to the national seashore each year. Most of these vehicles are on the national seashore during the summer. An *Off-road Vehicle Management Plan*, currently under development, will determine how all off-road vehicles in the national seashore will be managed.

## VISITOR USE AND EXPERIENCE

### METHODOLOGY

NPS *Management Policies 2006* state that the enjoyment of park unit resources and values is part of the fundamental purpose of all park units, and that the Park Service is committed to providing appropriate, high-quality opportunities for visitor enjoyment. Among the national seashore's long-term goals are providing appropriate visitor services and sustainable support facilities that can accommodate projected visitor use increases and can be reasonably maintained given the logistical and environmental challenges of the barrier islands. The national seashore also has the objective of providing visitors with information, interpretation, and education that enhances their understanding of the unique natural and cultural history of the barrier islands.

Observation of visitation patterns combined with assessment of what is currently available was used to estimate the impacts of the actions presented under the various alternatives.

### Intensity Definitions

**Negligible:** The impact would be at or below the lower levels of detection and would not have an appreciable effect on visitors.

**Minor:** The impact would be slight but detectable, would not occur in primary resource areas, or would affect few visitors.

**Moderate:** The impact would be readily apparent, would occur in primary resource areas, or would affect many visitors. The impact would be clearly detectable by visitors and could have an appreciable effect on visitor experiences.

**Major:** The impact would be severely adverse or exceptionally beneficial, would occur in primary resource areas, or would affect the majority of visitors.

### Duration of Impact

Short-term impacts would be less than one year, and long-term impacts would extend beyond one year and have a permanent effect on visitor use and experience.

### ALTERNATIVE A (NO ACTION)

#### Analysis

Under alternative A, visitors to the national seashore would continue to have a primarily self-directed, rustic experience. Access to the barrier islands would be by private boat or by concession-operated passenger and vehicle ferries departing from private docks. Pending the outcome of future management decisions supported by an off-road vehicle plan, visitors would continue to be able to drive private vehicles from the Long Point and Great Island concession areas and take guided tours from those locations. Limited ATV tours of Portsmouth Village and Cape Lookout Village would continue, as well as vehicle tour and shuttle services originating in the lighthouse area and traveling to points on South Core Banks. Limited vehicle transportation services would continue to be provided from Long Point and Great Island concession areas on a reservation basis.

Rustic overnight lodging would remain at Long Point and Great Island, and limited supplies would be available for purchase at these locations and the lighthouse area. Opportunities would remain for chartered fishing and sailboat excursions and other guided activities. Kayaks could be rented on the mainland for transport to the islands. NPS ranger-led interpretive activities and other educational programs would continue. Minimal new construction or development would occur in support of commercial

services beyond what is currently planned or underway.

Continuation of the above opportunities and the diverse array of other customary activities at the national seashore would have long-term beneficial impacts on visitor use and experience.

Novice or first-time visitors who depart for the islands without first stopping at the NPS Harkers Island Visitor Center would likely continue to receive inadequate orientation to the national seashore and other advance information to prepare them for their trip. Information imparted by concessions operators could be inconsistent and not fully coordinated with NPS interpretive objectives. Also, visitors would not be able to purchase land transportation on the islands and may not be aware of land transportation opportunities until after they have departed from the mainland. Consequently, visitors lacking information on land transportation opportunities and/or a convenient means of procuring these services would continue to have limited opportunities to explore areas of the national seashore that are not within walking distance of the customary arrival points. These conditions would have long-term minor to moderate adverse effects on visitor experience.

### Cumulative Impacts

Proposed rehabilitation of historic structures in the Cape Lookout Village Historic District would allow visitors to have overnight / extended stay opportunities under a concessions operation. Overnight and day-use visitors to the district would receive greater appreciation of the historical and architectural significance of the structures and the district's cultural landscape. Other projects either underway or proposed that would have a impact on visitor use and experience are facility improvements in the vicinity of the lighthouse, rehabilitation of the lighthouse,

and implementation of recommendations from the cultural landscape reports (Wiss, Janney et al. 2005 and 2007). The visitor experience in the lighthouse area of the Cape Lookout Village Historic District would be enhanced by the construction of new restrooms, removal of public vehicle parking to a location north of the district, and new facilities that provide better visitor orientation and interpretation of the historic district's significant resources.

Eventual rehabilitation and opening of the lighthouse to regular visitor access would be expected to attract more visitors to this iconic structure and other portions of the historic district and South Core Banks. Implementation of recommendations for enhancing the integrity of the district's cultural landscape (e.g., preserving historic patterns of circulation and spatial relationships among the structures) would also serve to improve the visitor experience. The above actions would have long-term beneficial impacts on visitor use and experience.

Data collected from the preliminary visitor use survey for the *Off-Road Vehicle (ORV) Management Plan* indicated that many visitors (particularly recreational fishermen) currently consider off-road vehicles integral to their experience and enjoyment of the national seashore, allowing them to more widely disperse and/or increase their accessibility to beaches for fishing. For these visitors, restrictions on vehicle use could be seen as impinging on their ability to pursue their customary recreational activities at the national seashore, resulting in long-term moderate adverse impacts on their visitor use and experience. Although few ORV plan survey respondents felt particularly crowded or negatively affected by the presence of other visitors and vehicles, others have expressed the desire to experience solitude and the natural sounds and vistas of the national seashore. For these visitors, restrictions on ORV use could be seen as enhancing their experience by limiting vehicle noise and other

associated impacts, resulting in long-term beneficial impacts. However, future use and management of off-road vehicles is currently uncertain, and will be addressed by the *Off-Road Vehicle (ORV) Management Plan* (in progress).

Consequently, the beneficial impacts of the other actions described above, in combination with the adverse and beneficial impacts of alternative A, would result in overall beneficial cumulative impacts on visitor use and experience. Alternative A's contribution to these cumulative impacts would be modest.

## Conclusion

Long-term beneficial impacts would continue to occur to visitor use and experience under alternative A (the no-action alternative) because of the retention of customary means of access to the barrier islands and the diversity of activities and interpretive opportunities available for visitors. Long-term minor to moderate adverse impacts would continue from limited NPS oversight and coordination of commercial service operations resulting in inconsistent visitor orientation and information. Visitors lacking information on land transportation opportunities and/or how to procure these services would continue to have limited opportunities to explore many areas of the national seashore, resulting in long-term minor to moderate adverse effects on visitor experience.

The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative A's contribution to these cumulative impacts would be modest.

## ALTERNATIVE B

### Analysis

Under alternative B, the national seashore would improve the management and

operation of commercial services. In addition to a diverse range of activities that could be facilitated by concession-guided services, visitors would continue to have opportunities for self-directed exploration and solitude. Under improved operations, access to the barrier islands would be by private boat or by concession-operated passenger and vehicle ferries departing from private docks at (or near) Atlantic and Davis, North Carolina. At least one passenger ferry would operate from Ocracoke, Harkers Island, Beaufort, and Morehead City. An expansion of ferry services would be authorized. These actions, by enhancing opportunities for visitors to access the barrier islands from a variety of departure points with more consistent and expanded departure schedules, would have long-term beneficial impacts on visitor use and experience.

Limited low-impact vehicle tours of Portsmouth Village and Cape Lookout Village would continue, as well as scheduled and reserved vehicle tour / shuttle services originating in the lighthouse area and traveling to points on South Core Banks. Rustic overnight lodging would remain at Long Point and Great Island. Limited supplies for purchase would be available at these locations and the lighthouse area. Discretely-placed vending machines could be provided. The availability of these supplies would add to visitor comfort and enable visitors (particularly those unprepared for their visit) to better cope with the undeveloped nature and sometimes harsh and/or unpredictable conditions of the Outer Banks. The resulting impacts would be long term and beneficial.

Opportunities for chartered fishing and sailboat excursions and other guided activities would be increased. Low-impact vehicles for group tours could be rented on the islands, and visitors would be able to pay for land transportation services on the islands rather than only on the mainland as currently. Kayaks could also be rented on the islands, which would facilitate this boating

opportunity for visitors who may not be equipped to transport or prepared to paddle their kayaks across the sound from the mainland. NPS ranger-led interpretive activities and other educational programs would continue. The resulting impacts would be long term and beneficial.

At existing locations on the islands, facilities would be improved or new construction would be undertaken as necessary to accommodate transportation and rental services, sales of supplies, etc. Construction activities could potentially introduce visual and atmospheric intrusions that could affect views, vistas, and the quality of the visitor experience during the period of construction. Construction would be scheduled to minimize conflicts with high visitation periods. Consequently, these adverse impacts would be minor and localized and would last only as long as the period of construction.

The National Park Service would improve coordination among commercial ferry and land transportation operations to reduce visitor congestion at the island arrival locations, particularly in the lighthouse area. Upon arrival, visitors would have increased opportunities to disperse, perhaps with land transportation and rental services readily available. Low-impact vehicle tours originating from Long Point and Great Island and at the cape would be added. Along with enhanced orientation, visitors would be better equipped to explore more of the national seashore. The resulting impacts would be long term and beneficial.

The Park Service would increase its oversight and training of commercial service providers to ensure that visitors receive orientation and interpretation that is consistent with NPS standards and objectives. As feasible, provision of adequate visitor parking near the ferry dock locations on the mainland would contribute to visitor convenience. Along with an increased NPS presence at these mainland dock locations, improvements to the Harkers

Island Visitor Center dock that would permit ferry operators to depart from that location would allow visitors to receive orientation at the visitor center before departing to the islands. Visitor interpretation, health, and safety would be enhanced by additional NPS staff hired to facilitate commercial operations. Existing environmental education programs administered by nonprofit organizations would remain in the Cape Lookout Village Historic District, and concessions operators could further assist the Park Service in providing in-depth interpretive programs. These measures would have long-term beneficial impacts on visitor use and experience by furthering visitor understanding and appreciation of the national seashore's resources and recreational opportunities.

### **Cumulative Impacts**

Proposed rehabilitation of historic structures in the Cape Lookout Village Historic District would allow visitors to have overnight / extended stay opportunities under a concessions operation. Overnight and day-use visitors to the district would receive greater appreciation of the historical and architectural significance of the structures and the district's cultural landscape. Other projects either underway or proposed that would have a impact on visitor use and experience are facility improvements in the vicinity of the lighthouse, rehabilitation of the lighthouse, and implementation of recommendations from the cultural landscape reports (Wiss, Janney et al 2005 and 2007). The visitor experience in the lighthouse area of the Cape Lookout Village Historic District would be enhanced by the construction of new restrooms, removal of public vehicle parking to a location north of the district, and the addition of facilities that provide better visitor orientation and interpretation of the historic district's significant resources.

Eventual rehabilitation and opening of the lighthouse to regular visitor access would be

expected to attract more visitors to this iconic structure and other portions of the historic district and South Core Banks. Implementation of recommendations for enhancing the integrity of the district's cultural landscape (e.g., preserving historic patterns of circulation and spatial relationships among the structures) would also serve to improve the visitor experience. The above actions would have long-term beneficial impacts on visitor use and experience.

Data collected from the preliminary visitor use survey for the *Off-Road Vehicle (ORV) Management Plan* indicated that many visitors (particularly recreational fishermen) currently consider off-road vehicles integral to their experience and enjoyment of the national seashore, allowing them to more widely disperse and/or increase their accessibility to beaches for fishing. For these visitors, restrictions on vehicle use could be seen as impinging on their ability to pursue their customary recreational activities at the national seashore, resulting in long-term moderate adverse impacts on their visitor use and experience. Although few ORV plan survey respondents felt particularly crowded or negatively affected by the presence of other visitors and vehicles, others have expressed the desire to experience solitude and the natural sounds and vistas of the national seashore. For these visitors, restrictions on ORV use could be seen as enhancing their experience by limiting vehicle noise and other associated impacts, resulting in long-term beneficial impacts. However, future use and management of off-road vehicles is currently uncertain, and will be addressed by the *Off-Road Vehicle (ORV) Management Plan* (in progress).

Consequently, the beneficial impacts of the actions described above, in combination with the beneficial and minor adverse impacts of alternative B, would result in overall beneficial cumulative impacts on visitor use and experience. Alternative B's contribution to these cumulative impacts would be modest.

## Conclusion

Long-term beneficial impacts would occur to visitor use and experience under alternative B because of expanded access throughout the national seashore, the diversity of recreational opportunities available to visitors, and operational and interpretive improvements.

The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative B's contribution to these cumulative impacts would be modest.

## ALTERNATIVE C

### Analysis

Under alternative C, the national seashore would improve the management and operation of commercial services. In addition to a diverse range of activities that could be facilitated by concession-guided services, visitors would continue to have opportunities for self-directed exploration and solitude. Under improved operations, access to the barrier islands would be by private boat or by concession-operated passenger and vehicle ferries departing from private docks at (or near) Atlantic and Davis, North Carolina. At least one passenger ferry would operate from Ocracoke, Harkers Island, Beaufort, and Morehead City. An expansion of ferry services would be authorized. These actions, by enhancing opportunities for visitors to access the barrier islands from a variety of departure points with more consistent and expanded departure schedules, would have long-term beneficial impacts on visitor use and experience.

Low-impact vehicle tours of Portsmouth Village would be provided, as well as scheduled vehicle tour / shuttle services originating in the lighthouse area and traveling to points on South Core Banks. Low-impact vehicle tours originating out of Long Point, Great Island, and the cape, and low-impact

vehicle rentals for individual use, would be added. Rustic overnight lodging would remain at Long Point and Great Island. At the concession lodging areas visitors would variously be able to purchase packaged food items, and camp and fishing supplies in addition to water, ice, fuel, and other currently available items. Vending machines could be provided and would be discretely placed at these locations and the lighthouse area. The availability of these expanded supplies and food items would enhance visitor comfort and would enable visitors (particularly those unprepared for their visit) to better cope with the undeveloped nature and sometimes harsh and/or unpredictable conditions of the Outer Banks. The resulting impacts would be long term and beneficial.

Opportunities would remain for chartered fishing and sailboat excursions and other guided activities. Low-impact vehicles for group tours and individual use could be rented on the islands, and visitors would be able to pay for land transportation services on the islands rather than only on the mainland as currently. Kayaks could also be rented on the islands, which would facilitate this boating opportunity for visitors who may not be equipped to transport kayaks across the sound from the mainland. NPS ranger-led interpretive activities and other educational programs would continue. The resulting impacts would be long term and beneficial.

At existing locations on the islands, facilities would be improved or new construction undertaken as necessary to accommodate transportation and rental services, sales of supplies, etc. Additional construction might also be required at mainland locations. Construction activities could potentially introduce visual and atmospheric intrusions that could affect views, vistas, and the quality of the visitor experience during the period of construction. Construction would be scheduled to minimize conflicts with high visitation periods. Consequently, these adverse impacts would be minor and localized

and would last only as long as the period of construction.

The National Park Service would improve coordination among commercial ferry and land transportation operations to reduce visitor congestion at the island arrival locations, particularly in the lighthouse area. Upon arrival, visitors would have increased opportunities to disperse, with land transportation and rental services readily available. Along with enhanced orientation, visitors would be better equipped to explore more of the national seashore. The resulting impacts would be long term and beneficial.

Under the potential operation of a commercial services provider, a structure or facility suited for large organized group activities, such as the former gun club, would be adapted and rehabilitated to accommodate school groups and other appropriate group functions. Also under this alternative, the Park Service would explore the possibility (through a separate planning effort) of providing overnight visitor lodging in historic buildings at Portsmouth Village Historic District similar to that planned for Cape Lookout Village Historic District. Visitors would have the opportunities for greater appreciation of the history, setting, and environment of Portsmouth Village. These actions, by expanding opportunities for visitors to have extended stay opportunities at Portsmouth Village as well as accommodating large group functions, would have long-term beneficial impacts on visitor use and experience; this beneficial impact would be greater than under alternative B.

The Park Service would increase its oversight and training of commercial service providers to ensure that visitors receive orientation and interpretation that is consistent with NPS standards and objectives. As feasible, provision of adequate visitor parking near the ferry dock locations on the mainland would contribute to visitor convenience. Along with an increased NPS presence at these mainland

dock locations, improvements to the Harkers Island Visitor Center dock that would permit ferry operators to depart from that location would allow visitors to receive orientation at the visitor center before departing to the islands. Visitor interpretation, health, and safety would be enhanced by additional NPS staff hired to facilitate commercial operations. The resulting impacts would be long term and beneficial.

Existing environmental education programs administered by nonprofit organizations would remain in the Cape Lookout Village Historic District area, and concessions operators could further assist the Park Service in providing in-depth interpretive programs. The number and diversity of educational and guided services/ tours would be increased over current levels to allow visitors to experience more of the national seashore in both structured and unstructured contexts. These measures would have long-term beneficial impacts on visitor use and experience by furthering visitor understanding and appreciation of the national seashore's resources and recreational opportunities.

### Cumulative Impacts

Proposed rehabilitation of historic structures in the Cape Lookout Village Historic District would allow visitors to have overnight / extended stay opportunities under a concessions operation. Overnight and day-use visitors to the district would have opportunities for greater appreciation of the historical and architectural significance of the structures and the district's cultural landscape. Other projects either underway or proposed that would have an impact on visitor use and experience are facility improvements in the vicinity of the lighthouse, rehabilitation of the lighthouse, and implementation of recommendations from the cultural landscape reports (Wiss, Janney et al. 2005 and 2007). The visitor experience in the lighthouse area of the Cape Lookout Village Historic District

would be enhanced by the construction of new restrooms, removal of public vehicle parking to a location north of the district, and the addition of facilities that provide better visitor orientation and interpretation of the historic district's significant resources. The resulting impacts would be long term and beneficial.

Eventual rehabilitation and opening of the lighthouse to regular visitor access would be expected to attract more visitors to this iconic structure and other portions of the historic district and South Core Banks. Implementation of recommendations for enhancing the integrity of the district's cultural landscape (e.g., preserving historic patterns of circulation and spatial relationships among the structures) would also improve the visitor experience. The resulting impacts would be long term and beneficial.

Data collected from the preliminary visitor use survey for the *Off-Road Vehicle (ORV) Management Plan* indicated that many visitors (particularly recreational fishermen) currently consider off-road vehicles integral to their experience and enjoyment of the national seashore, allowing them to more widely disperse and/or increase their accessibility to beaches for fishing. For these visitors, restrictions on vehicle use could be seen as impinging on their ability to pursue their customary recreational activities at the national seashore, resulting in long-term moderate adverse impacts on their visitor use and experience. Although few ORV plan survey respondents felt particularly crowded or negatively affected by the presence of other visitors and vehicles, others have expressed the desire to experience solitude and the natural sounds and vistas of the national seashore. For these visitors, restrictions on ORV use could be seen as enhancing their experience by limiting vehicle noise and other associated impacts, resulting in long-term beneficial impacts. However, future use and management of off-road vehicles is currently uncertain, and will

be addressed by the *Off-Road Vehicle (ORV) Management Plan* (in progress).

The above actions would have long-term beneficial impacts on visitor use and experience. Consequently, the beneficial impacts of the other actions described above, in combination with the beneficial and minor adverse impacts of alternative C, would result in overall long-term beneficial cumulative impacts on visitor use and experience. Alternative C's contribution to these cumulative impacts would be modest.

### **Conclusion**

Long-term beneficial impacts would occur to visitor use and experience under alternative C because of expanded access throughout the national seashore, the diversity of recreational opportunities available to visitors, and operational and interpretive improvements.

The overall cumulative impacts on visitor use and experience would be long term and beneficial. Alternative C's contribution to these cumulative impacts would be modest.

## CULTURAL RESOURCES

### IMPACTS ON CULTURAL RESOURCES AND SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT

In this environmental assessment, impacts on cultural resources are described in terms of type, context, duration, and intensity, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). These impact analyses are intended, however, to comply with the requirements of both NEPA and Section 106 of the National Historic Preservation Act (NHPA). In accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800, *Protection of Historic Properties*), impacts to cultural resources were also identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that are either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected, national register eligible or listed cultural resources; and (4) considering ways to avoid, minimize or mitigate adverse effects.

Under the advisory council's regulations a determination of either *adverse effect* or *no adverse effect* must also be made for affected national register listed or eligible cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the national register, e.g., diminishing the integrity (or the extent to which a resource retains its historic appearance) of its location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternatives that would occur later in time, be

farther removed in distance, or be cumulative (36 CFR 800.5, *Assessment of Adverse Effects*). A determination of *no adverse effect* means there is an effect, but the effect would not diminish the characteristics of the cultural resource that qualify it for inclusion in the national register.

CEQ regulations and the NPS *Conservation Planning, Environmental Impact Analysis and Decision Making* (Director's Order 12) also call for a discussion of mitigation as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g., reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under the National Historic Preservation Act only. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Cultural resources are nonrenewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

A Section 106 summary is included in the impact analysis sections for alternatives B and C, the action alternatives. The Section 106 summary is an assessment of the effect of the undertaking (implementation of the alternative) on national register eligible or listed cultural resources only, based upon the criterion of effect and criteria of adverse effect found in the advisory council's regulations.

## HISTORIC DISTRICTS, STRUCTURES, BUILDINGS, AND CULTURAL LANDSCAPES

### Intensity Definitions

**Negligible:** Impact is at the lowest levels of detection with neither adverse nor beneficial consequences. The determination of effect for Section 106 would be *no adverse effect*.

**Minor:** Adverse impact — Alteration of a feature(s) or landscape pattern(s) would not diminish the overall integrity of the resource (structure, building, or landscape). The determination of effect for Section 106 would be *no adverse effect*.

**Moderate:** Adverse impact — Alteration of a feature(s) or landscape pattern(s) would diminish the overall integrity of the resource (structure, building, or landscape). The determination of effect for Section 106 would be *adverse effect*. A memorandum of agreement is executed among the National Park Service and applicable state or tribal historic preservation officer and, if necessary, the Advisory Council on Historic Preservation in accordance with 36 CFR 800.6(b). Measures identified in the memorandum to minimize or mitigate adverse impacts reduce the intensity of impact under the National Historic Preservation Act from major to moderate.

**Major:** Adverse impact — Alteration of a feature(s) or landscape pattern(s) would diminish the overall integrity of the resource (structure, building, or landscape). The determination of effect for Section 106 would be *adverse effect*. Measures to minimize or mitigate adverse impacts cannot be agreed upon and the National Park Service and applicable state or tribal historic preservation officer and/or Advisory Council are unable to negotiate and execute a memorandum of agreement in accordance with 36 CFR 800.6(b).

### Duration of Impact

Short-term impacts would result from actions immediately and/or directly affecting historic properties (e.g., construction-related activities associated with restoring historic buildings). Long-term impacts would occur, for example, from preservation undertakings carried out over several months or years (e.g., reestablishing contributing vegetation communities in historic districts), or the wear and tear on historic properties resulting from visitor use over an extended period, etc.

### Alternative A (No Action)

**Analysis.** Under alternative A, the national seashore would continue to variously stabilize, rehabilitate, and restore historic buildings and structures contributing to the significance of the Cape Lookout Village Historic District and Portsmouth Village Historic District. These historic buildings are susceptible to severe weathering and storm damage from the harsh climate of the Outer Banks, and concerted NPS maintenance is required to preserve their integrity. All preservation, rehabilitation, and restoration treatments would be carried out in accordance with NPS policies and the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Any adverse impacts would be long term but negligible in intensity.

At Portsmouth Village, the visitor center (Dixon / Salter House), the Methodist Church, the school, the post office / general store, and the Life Saving Station would remain open to the public for visitor interpretation and other functions, such as the homecomings held at the church every other year. In the light station portion of the Cape Lookout Village Historic District, the 1873 Keepers' Quarters would continue to serve as a visitor center with interpretive exhibits. Visitors would continue to have limited scheduled access to the lighthouse pending full rehabilitation of the structure. Guided

ATV tours originating near Portsmouth Village would continue, and tour visitors and other day-use visitors would receive interpretation of the preserved structures and cultural landscapes. The national seashore would continue to monitor visitor use to ensure that increasing visitation levels and patterns of use do not adversely affect historic building fabric or other character-defining qualities of the historic districts and their contributing cultural landscapes (e.g., historic paths / roads, vegetation and spatial arrangement of structures and features). Any adverse impacts would be long-term but of negligible to minor intensity.

**Cumulative Impacts.** In accordance with the *Cape Lookout Village Historic Structures Reuse Implementation Plan*, the Park Service has undertaken the stabilization of structures contributing to the significance of the Cape Lookout Village Historic District. Selected structures would be further rehabilitated / restored for NPS administrative and interpretive purposes, and for overnight visitor accommodations under a concessions operation. Adaptive use of rehabilitated structures would entail the installation of necessary utilities — electrical and potable water lines and a central waste water treatment system. Three buildings (the 1907 Lighthouse Keeper’s Quarters, the 1887 Life-Saving Station, and the 1924 Life-Saving Station Boat House) would be relocated from the residential portion of the historic district to their original building sites at the lighthouse station and U.S. Coast Guard areas. Relocation of these buildings (following future environmental and structural feasibility studies) would enhance the spatial arrangement of contributing properties to more accurately reflect the historical context and clustered configuration that existed during the district’s period of significance. Vegetation thinning would be undertaken in approved areas to reduce the threat of fire near buildings selected for occupancy and to enhance views and the visual orientation and connection that

historically existed among the buildings and structures.

Plan to rehabilitate the light station area would continue, with the objective of eventually opening the lighthouse to the public for interpretive purposes on a daily basis. Shoreline protection measures have been completed that have repaired shoreline erosion that threatened the lighthouse and nearby structures. Recent visitor use improvements in the light station area would not only enhance visitor orientation and appreciation, but also contribute to the protection of the Cape Lookout Village Historic District. Additionally, the treatment recommendations presented in the cultural landscape reports (Wiss, Janney, et al. 2005 and 2007) for Cape Lookout Village Historic District and Portsmouth Village Historic District would further enhance and preserve the historic setting, views, and built environment of these historic districts. Implementation of the above actions would have long-term negligible to minor adverse impacts on contributing historic buildings, structures, and cultural landscape features.

The impacts associated with implementation of alternative A would have long-term negligible to minor adverse impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District. Consequently, the impacts of the other actions described above, in combination with the impacts of alternative A, would result in overall long-term negligible to minor adverse cumulative impacts. Alternative A’s contribution to these impacts would be small.

**Conclusion.** The overall impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District would be long term, negligible to minor, and adverse under alternative A.

Long-term negligible to minor adverse cumulative impacts would also occur (particularly in the lighthouse vicinity and

Cape Lookout Village Historic District) as other proposed undertakings are implemented — such as stabilization and rehabilitation / adaptive use of historic structures and enhancement of the cultural landscape. Alternative A's contribution to these impacts would be small.

Because there would be no adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Cape Lookout National Seashore, (2) key to the natural or cultural integrity of the national seashore or to opportunities for enjoyment of the national seashore, or (3) identified as a goal in the national seashore's *General Management Plan* or other relevant NPS planning documents, there would be no impairment of the national seashore's resources or values.

### Alternative B

**Analysis.** Under alternative B (as under alternative A), the national seashore would continue to variously stabilize, rehabilitate, and restore historic buildings and structures contributing to the significance of the Cape Lookout Village Historic District and Portsmouth Village Historic District. These historic buildings are susceptible to severe weathering and storm damage from the harsh climate of the Outer Banks, and concerted NPS maintenance is required to preserve their integrity. All preservation treatments would be carried out in accordance with NPS policies and the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Any adverse impacts would be long term but negligible in intensity.

No new facility construction would occur within the historic districts in support of commercial services beyond that proposed under other plans (see cumulative impacts section below). If new or additional facilities were required, these would be located at existing visitor use areas outside of the

districts and would (as necessary) be screened by vegetation or otherwise designed to be as visually unobtrusive as possible. Any adverse impacts would be long term but negligible to minor in intensity.

At Portsmouth Village, the visitor center (Dixon / Salter house), the Methodist Church, the school, the post office / general store, and the Life-Saving Station would remain open to the public for visitor interpretation and other functions, such as the homecomings held at the church every other year. In the light station portion of the Cape Lookout Village Historic District, the 1873 Keepers' Quarters would continue to serve as a museum with interpretive exhibits. Visitors would continue to have limited scheduled access to the lighthouse pending full rehabilitation of the structure. Guided low-impact vehicle tours of Portsmouth Village Historic District and Cape Lookout Village Historic District would be provided. Tour visitors and other day-use visitors would receive interpretation of the preserved structures and cultural landscapes. Expanded and enhanced transportation opportunities would be expected to bring more visitors into the historic districts in comparison with alternative A (no action). Consequently, the national seashore would augment its resource protection efforts to monitor visitor use and ensure that increasing visitation levels and patterns of use do not adversely affect historic building fabric or other character-defining qualities of the historic districts and their contributing cultural landscapes (e.g., historic paths / roads, vegetation and spatial arrangement of structures and features). Enhanced NPS education / interpretative programs and outreach would also assist efforts to inform visitors of the importance of protecting cultural resources. There would be few, if any, adverse impacts on historic structures and cultural landscapes. Any adverse impact would be negligible to minor and long term.

**Cumulative Impacts.** In accordance with the *Cape Lookout Village Historic Structures Reuse*

*Implementation Plan*, the Park Service has undertaken the stabilization of structures contributing to the significance of the Cape Lookout Village Historic District. Selected structures would be further rehabilitated / restored and adaptively used for NPS administrative and interpretive purposes and for overnight visitor accommodations under a concessions operation. Adaptive use of some of the rehabilitated structures would entail the installation of necessary utilities — electrical and potable water lines and a central waste water treatment system. Three buildings (the 1907 Lighthouse Keeper’s Quarter’s, the 1887 Life-Saving Station, and the 1924 Life-Saving Station Boat House) would be relocated from the residential portion of the historic district to their original building sites at the lighthouse station and U.S. Coast Guard areas. Relocation of these buildings (following future environmental and structural feasibility studies) would enhance the spatial arrangement of contributing properties to more accurately reflect the historical context and clustered configuration that existed during the district’s period of significance. Vegetation thinning would be undertaken in approved areas to reduce the threat of fire near buildings selected for occupancy and to enhance views and the visual orientation and connection that historically existed among the buildings and structures. Any adverse impacts would be long term but negligible to minor in intensity.

Ongoing rehabilitation of the lighthouse would continue, with the objective of eventually opening the structure to the public for interpretive purposes on a daily basis. Shoreline stabilization measures have been completed that have repaired shoreline erosion that threatened the lighthouse and nearby structures. Recent visitor use improvements in the lighthouse area would not only enhance visitor orientation and appreciation but would also contribute to the protection of the Cape Lookout Village Historic District. Also, the treatment recommendations presented in the cultural landscape reports

(Wiss, Janney, et al. 2005 and 2007) for Cape Lookout Village Historic District and Portsmouth Village Historic District would further enhance and preserve the historic setting, views, and built environment of these historic districts. Implementation of the above actions would have long-term negligible to minor adverse impacts on contributing historic buildings, structures, and cultural landscape features.

The impacts associated with implementation of alternative B would have long-term negligible to minor adverse impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District. Consequently, the impacts of the other actions described above, in combination with the impacts of alternative B, would result in overall long-term negligible to minor adverse cumulative impacts. Alternative B’s contribution to these impacts would be small.

**Conclusion.** The overall impacts on the Portsmouth Village and Cape Lookout Village Historic Districts would be long term, negligible to minor, and adverse

Long-term negligible to minor adverse cumulative impacts would also occur (particularly in the lighthouse vicinity and Cape Lookout Village Historic District) as other proposed undertakings are implemented such as stabilization and rehabilitation / adaptive use of historic structures, and enhancement of the cultural landscape. Alternative B’s contribution to these impacts would be small.

Because there would be no adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Cape Lookout National Seashore, (2) key to the natural or cultural integrity of the national seashore or to opportunities for enjoyment of the national seashore, or (3) identified as a goal in the national seashore’s *General Management Plan* or other relevant NPS planning documents,

there would be no impairment of the national seashore's resources or values.

**Section 106 Summary.** After applying the Advisory Council on Historic Preservation's criteria of adverse effect (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of alternative B would result in no adverse effect to national register eligible or listed buildings, structures, and cultural landscape features at the national seashore.

### Alternative C

**Analysis.** Under alternative C (as under alternative A), the national seashore would continue to variously stabilize, rehabilitate, and restore historic buildings and structures contributing to the significance of the Cape Lookout Village Historic District and Portsmouth Village Historic District. These historic buildings are susceptible to severe weathering and storm damage from the harsh climate of the Outer Banks, and concerted NPS maintenance is required to preserve their integrity. All preservation treatments would be carried out in accordance with NPS policies and the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Any adverse impacts would be long term but negligible in intensity.

Under this alternative, the national seashore would explore the possibility of rehabilitating selected historic buildings at Portsmouth Village for possible visitor overnight / extended stay opportunities under a concessions operation. This would entail further detailed analyses and a separate planning effort as necessary to determine if rehabilitation and adaptive use with essential utilities could be feasibly pursued given Portsmouth's environmental conditions and other limiting factors. No additional facility construction would occur within the Portsmouth Village Historic District or Cape Lookout Village Historic District in support of commercial

services beyond that proposed under other plans (see cumulative impacts section below). If new or additional facilities are required, these would be located at existing visitor use areas outside of the districts and would (as necessary) be screened by vegetation or otherwise designed to be as visually unobtrusive as possible. The placement of new facilities outside the historic districts and potential rehabilitation / adaptive use of historic structures at Portsmouth Village Historic District for visitor lodging in accordance with the *Secretary's Standards* would result in long-term adverse impacts that are negligible to minor intensity on historic properties.

At Portsmouth Village, the visitor center (Dixon / Salter house), the Methodist Church, the school, the post office / general store, and the Life Saving Station would remain open to the public for visitor interpretation and other functions, such as the homecomings held at the church every other year. In the lighthouse portion of the Cape Lookout Village Historic District, the 1873 Keepers' Quarters would continue to serve as a museum with interpretive exhibits. Visitors would continue to have limited scheduled access to the lighthouse pending full rehabilitation of the structure. Guided low-impact vehicle tours of Portsmouth Village Historic District and Cape Lookout Village Historic District would be provided. Tour visitors and other day-use visitors would receive interpretation of the preserved structures and cultural landscapes. Expanded and enhanced transportation opportunities would be expected to bring more visitors into the historic districts in comparison with alternative A (no action). Consequently, the national seashore would augment its resource protection efforts to monitor visitor use and ensure that increasing visitation levels and patterns of use do not adversely affect historic building fabric or other character-defining qualities of the historic districts and their contributing cultural landscapes (e.g., historic paths / roads, vegetation and spatial arrangement of structures and features). Enhanced NPS

education / interpretative programs and outreach would also assist efforts to inform visitors of the importance of protecting cultural resources. Effective implementation of preservation treatments and monitoring activities would result in few, if any, adverse impacts on historic buildings, structures, and cultural landscapes. Any adverse impact would be negligible to minor and long term.

**Cumulative Impacts.** In accordance with the *Cape Lookout Village Historic Structures Reuse Implementation Plan*, the Park Service has undertaken the stabilization of structures contributing to the significance of the Cape Lookout Village Historic District. Selected structures would be further rehabilitated / restored and adaptively used for NPS administrative and interpretive purposes and for overnight visitor accommodations under a concessions operation. Adaptive use of some of the rehabilitated structures would entail the installation of necessary utilities — electrical and potable water lines and a central waste water treatment system. Three buildings (the 1907 Lighthouse Keeper’s Quarters, the 1887 Life-Saving Station, and the 1924 Life-Saving Station Boat House) would be relocated from the central residential village portion of the historic district to their original building sites at the lighthouse station and U.S. Coast Guard areas. Relocation of these buildings (following future environmental and structural feasibility studies) would enhance the spatial arrangement of contributing properties to more accurately reflect the historical context and clustered configuration that existed during the district’s period of significance. Vegetation thinning would be undertaken in approved areas to reduce the threat of fire near buildings selected for occupancy and to enhance views and the visual orientation and connection that historically existed among the buildings and structures. Any adverse impacts would be long term but negligible to minor in intensity.

Ongoing rehabilitation of the lighthouse would continue, with the objective of

eventually opening the structure to the public for interpretive purposes on a daily basis. Shoreline protection measures have been completed that have repaired the erosion that threatened the lighthouse and nearby structures. Recent visitor use improvements in the lighthouse area would not only enhance visitor orientation and appreciation but also contribute to the protection of the Cape Lookout Village Historic District. Also, the treatment recommendations presented in the cultural landscape reports (Wiss, Janney, et al. 2005 and 2007) for Cape Lookout Village Historic District and Portsmouth Village Historic District would further enhance and preserve the historic setting, views, and built environment of these historic districts. Implementation of the above actions would have long-term negligible to minor adverse impacts on contributing historic buildings, structures, and cultural landscape features.

The impacts associated with implementation of alternative C would have long-term negligible to minor adverse impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District. Consequently, the impacts of the other actions described above, in combination with the impacts of alternative C, would result in overall long-term negligible to minor adverse cumulative impacts. Alternative C’s contribution to these impacts would be small.

**Conclusion.** The overall impacts on the Portsmouth Village Historic District and Cape Lookout Village Historic District would be long term, adverse, and negligible to minor under alternative C. The potential rehabilitation and adaptive use of historic structures at Portsmouth Village Historic District for overnight visitor lodging would have long-term negligible to minor adverse impacts provided that the rehabilitation was carried out in accordance with the *Secretary’s Standards*.

Long-term negligible to minor adverse cumulative impacts would also occur

(particularly in the lighthouse vicinity and Cape Lookout Village Historic District) as other proposed undertakings are implemented such as stabilization and rehabilitation / adaptive use of historic structures and enhancement of the cultural landscape. Alternative C's contribution to these impacts would be small.

Because there would be no adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Cape Lookout National Seashore, (2) key to the natural or cultural integrity of the national seashore or to opportunities for enjoyment of the national

seashore, or (3) identified as a goal in the national seashore's *General Management Plan* or other relevant NPS planning documents, there would be no impairment of the national seashore's resources or values.

**Section 106 Summary.** After applying the Advisory Council on Historic Preservation's criteria of adverse effect (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of alternative C would result in no adverse effect to national register eligible or listed buildings, structures, and cultural landscape features at the national seashore.

## NATURAL RESOURCES

### WILDLIFE

The NPS Organic Act, which directs park system units to conserve wildlife unimpaired for future generations, is interpreted by the agency to mean that native animal life should be protected and perpetuated as part of the park unit's natural ecosystem. Natural processes are relied on to control populations of native species to the greatest extent possible; otherwise they are protected from harvest, harassment, or harm by human activities. According to NPS *Management Policies 2006*, the restoration of native species is a high priority (sec. 4.1). Management goals for wildlife include maintaining components and processes of naturally evolving park ecosystems, including natural abundance, diversity, and the ecological integrity of plants and animals. Information on wildlife at Cape Lookout National Seashore was taken from park documents and records. The staff at the national seashore and the U.S. Fish and Wildlife Service also provided wildlife information.

#### Intensity Definitions

**Negligible:** There would be no observable or measurable impacts on native species, their habitats, or the natural processes sustaining them. Impacts would be well within natural fluctuations.

**Minor:** Impacts would be detectable, but they would not be expected to be outside the natural range of variability of native species' populations, their habitats, or the natural processes sustaining them. Mitigation measures, if needed to offset adverse effects, would be simple and successful.

**Moderate:** Breeding animals of concern are present; animals are present during particularly vulnerable life stages, such as migration or juvenile stages; mortality or interference with activities necessary for

survival can be expected on an occasional basis, but is not expected to threaten the continued existence of the species in the national seashore. Impacts on native species, their habitats, or the natural processes sustaining them would be detectable, and they could be outside the natural range of variability. Mitigation measures, if needed to offset adverse effects, would be extensive and likely successful.

**Major:** Impacts on native species, their habitats, or the natural processes sustaining them would be detectable, and they would be expected to be outside the natural range of variability. Key ecosystem processes might be disrupted. Loss of habitat might affect the viability of at least some native species. Extensive mitigation measures would be needed to offset any adverse effects, and their success would not be guaranteed.

#### Duration of Impact

**Short-term** — Recovers in less than one year.

**Long-term** — Takes more than one year to recover.

#### Alternative A (No Action)

Concession operations in the national seashore would continue to operate from their existing locations, and there would be no new disturbance to wildlife habitat from these operations at the national seashore. Impacts from current concession operations include disturbance to some species and their habitats. The adverse impact to species that become habituated to human activities would be less than for those species that are more easily disturbed. Because the adverse impacts would also be limited to the areas closest to existing

activity areas, the long-term adverse impacts would be negligible.

Visitors who travel by commercial ferry to Cape Lookout, Great Island, or Long Point would continue to have limited options for on-island transportation. Because relatively few visitors would be able to take advantage of these services, most visitors would remain near their original debarkation point and relatively few commercial visitor activities would disturb or displace wildlife. The long-term adverse impacts to wildlife associated with dispersal of visitors would continue to be negligible.

Visitors to Portsmouth who arrive by ferry would be able to participate in a guided tour of the village and an ATV tour of the beach. Because participants are on a guided tour and would not be going outside areas designated for vehicle use, the long-term adverse impacts would continue to be negligible.

**Cumulative Effects.** Visitors to the national seashore could transport private vehicles to the seashore via concession-operated ferry service. These visitors use their vehicles for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. Visitors may access all areas of the national seashore via established routes except those closed for resource protection or safety reasons. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles (ORVs) are transported by ferry to the seashore each year. Disturbances to wildlife and their habitat that have resulted in a decline in populations have been associated with increased recreational use at the seashore (NPS 2006a). These adverse impacts on wildlife from recreational uses including ORV use would continue under all alternatives analyzed in this plan. The impacts on wildlife from current ORV use were analyzed in the *Interim Protected Species Management Plan* (NPS 2006a). The long-term adverse impacts on birds that are winter, fall, spring,

and summer residents would be minor. The long term adverse impacts on invertebrates in the intertidal zone would be negligible. The impacts from future ORV use at the national seashore will be analyzed in detail as part of the *ORV Management Plan* that is currently under development. All ORV use at the national seashore, including commercial visitor service providers, would be managed under this plan and the accompanying regulations. Management of ORV use at the national seashore will be consistent with Executive Order 11644, which states that “[a]reas and trails shall be located in the National Park System . . . only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.”

Under this alternative 8–10 of the historic structures in the Cape Lookout Village Historic District would be rehabilitated for occupancy by visitors. Management of these facilities for visitor use would be accomplished through a commercial service agreement similar to those in place for Great Island and Long Point. The opportunity to stay in these structures overnight would have some adverse impacts on wildlife. The impacts include increased light at night from the structures and an increase in potential food sources, particularly for scavengers. The mitigation measures that would be used to limit the impacts to wildlife associated with occupancy of the structures in Cape Lookout Village Historic District were described in the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007). These measures include limiting outdoor lighting to what is necessary for health and safety purposes and shielding any lights in the village to direct light toward the ground. Also, all trash receptacles would be designed to prevent access by wildlife to decrease scavenging. The concessioner would be required to removal all trash from the island from concession operations.

In addition, as part of the *Reuse Implementation Plan*, there would be localized removal of vegetation from around the historic structures to reduce the hazards from fire and storms as well as enhance historic views. These actions would be guided by the recommendations of the “Cape Lookout Village Cultural Landscape Report.” The recommendations in the report recognize the value of conserving wildlife habitat in the national seashore and suggest approaches for limiting the impacts on wildlife habitat that could potentially result from modifying vegetation in the historic district. The extent of any vegetation removal would be limited, and management efforts would focus first on removing aged and diseased plant material. The vegetation would be removed in phases, and the minimum amount of vegetation would be removed to re-create the historic views. No vegetation type would be completely removed from the project area. It is possible that some individuals from the local bird, mammal, or reptile populations could be lost during project implementation. The loss of these limited numbers of individuals would have negligible effects on the local population of any resident species on the island, and would not likely adversely impact ecosystem functions or biodiversity.

The impacts of the other actions described above, in combination with the impacts of alternative A, would result in negligible to minor cumulative adverse impacts in the long term. Because of the limited number of commercial vehicles on the national seashore and mitigation measures to reduce impacts on wildlife in the residential area of the Cape Lookout Village Historic District, the contribution of alternative A to the overall cumulative impacts on wildlife would be very small.

**Conclusion.** Under this alternative the long-term adverse impacts on wildlife from commercial service operations would be negligible because there would be no new disturbance to wildlife habitat or life activities. The long-term adverse impacts on wildlife

from existing activities would continue to be negligible because the impacts would be highly localized.

The long-term adverse impacts on wildlife associated with dispersal of visitors would continue to be negligible.

The long-term adverse impacts associated with the ATV tours near Portsmouth would continue to be negligible.

The cumulative adverse impact on wildlife at the national seashore from ORV use would continue under alternative A. The contribution of this alternative to the overall cumulative impacts would be very small.

The cumulative adverse impact on wildlife at the national seashore from alternative A, together with the impacts of ORV use and the occupancy of Cape Lookout Village Historic District, would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be very small.

There would be no impairment of the national seashore’s resources or values.

### Alternative B

Under this alternative there would be increased impacts on wildlife and their habitats as compared to alternative A because more visitors would be able to disperse over a wider area of the national seashore. Visitors who arrive at the lighthouse would be able to purchase tickets to Cape Lookout point after arriving at the national seashore, enabling more visitors to take advantage of this opportunity. Land transportation would also be available from the concession cabin areas at Great Island or Long Point, and these services would cover a larger area of South Core and North Core Banks. The long-term adverse impacts of commercial vehicles traveling over a larger area of the national seashore would

include disturbance and displacement of wildlife but would be negligible because the vehicles would continue to use existing transportation routes.

As visitors move away from existing activity centers they would have a greater opportunity to encounter wildlife. Some visitors could intentionally or unintentionally harass wildlife. Harassment of wildlife is particularly harmful during the breeding season, because it could cause some individuals to leave a nest or young unattended and vulnerable and could cause a reduction in reproductive success. The long-term adverse impacts on individual animals would be moderate. The long-term adverse impacts to populations on the national seashore would vary depending on the species. However, the potential adverse impacts on wildlife from contact with visitors could be partially mitigated because commercial service operators would be required to provide their clients with appropriate orientation information about the seashore as well as an introduction to the national seashore's primary interpretive themes. These efforts would support resource protection strategies on the island by providing visitors with information to become stewards of the resources at the national seashore. With this mitigation measure, the long-term adverse impacts associated with visitor dispersal would be minor to moderate.

Under this alternative low-impact vehicle tours would be available at three additional locations — Long Point, Great Island, and Cape Lookout. Because visitors would be with a tour guide, who is familiar with the regulations and requirements, the adverse impacts on wildlife would be similar to those at Portsmouth for alternative A, adverse but negligible in the long term.

Currently visitors must bring their own food and water to the national seashore and are asked to take all refuse with them when they leave. Under this alternative it would be possible for visitors to purchase some snack

items at Cape Lookout, Great Island, Long Point, and Portsmouth. This could result in increased availability of food for scavengers throughout the national seashore. Some wildlife species might become habituated to humans and their food and become pests. These behaviors could adversely affect the health of these species. To mitigate the adverse impacts on wildlife, the national seashore staff would increase outreach to visitors to make sure visitors remove their trash. The long-term adverse impacts on wildlife associated with the increased availability of food on the national seashore would be negligible to minor.

Under this alternative, some additional facilities and infrastructure could be developed to provide storage space for commercial service provider's equipment (e.g., kayaks and low-impact vehicles) that would be used on the national seashore. Other facilities could be considered to accommodate increased visitation or other operational needs. These facilities would be constructed near existing activity centers and, in the case of the lighthouse, outside the historic district. Facility construction might result in the loss of habitat, displacement, or mortality of some individuals. To mitigate these impacts, the national seashore would, to the extent practicable, work in areas that have been previously disturbed and would schedule activities to avoid seasons when species would be particularly vulnerable to disturbance. With these measures, the short- and long-term adverse impacts associated with developing additional facilities would be negligible to minor.

Under this alternative visitors would be able to participate in additional activities that could include cultural demonstrations, kayak tours, nighttime hikes, and lighthouse and historic district tours. The extent of the potential impacts associated with these activities would be determined by location of the tours, the time of year, and the species potentially impacted. The type, route, and timing of these tours would be established to allow visitors to

experiences resources or see wildlife at the national seashore with the least impact. Because visitors would be participating in organized tours and accompanied by tour guides, the potential for adverse impacts would also be small. The long-term adverse impacts on wildlife from the increased number of tours available to visitors would be negligible.

Also under this alternative the National Park Service would consider expanding the hours ferry service would be available to allow visitor to arrive earlier and stay later on the national seashore. Many species at the national seashore are more active in the early morning and early evening hours. Currently there are few visitors on the seashore at this time. With expanded hours of operation more visitors might be at the seashore during the morning and the evening hours. However, the number of visitors who would take advantage of the expanded hours is likely to be relatively small. Most of these visitors would be concentrated in the activity centers or participating in tours. For these reasons the impact on wildlife from extending the hours of ferry service to and from the seashore would be adverse but negligible to minor in the long term.

**Cumulative Effects.** Visitors to the national seashore could transport private vehicles to the seashore via concession-operated ferry service. These visitors use their vehicles for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. Visitors could access all areas of the national seashore via established routes except those closed for resource protection, safety reasons, or for proposed wilderness. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles (ORVs) are transported by ferry to the national seashore each year. Disturbances to wildlife and their habitat that have resulted in a decline in populations have been associated with increased recreational use at the national

seashore (NPS 2006a). These adverse impacts on wildlife from recreational uses including ORV use would continue under all alternatives analyzed in this plan. The impacts on wildlife from current ORV use were analyzed in the *Interim Protected Species Management Plan* (NPS 2006a). The long-term adverse impacts on birds that are winter, fall, spring, and summer residents would be minor. The long-term adverse impacts on invertebrates in the intertidal zone would be negligible. The impacts from future ORV use at the national seashore will be analyzed in detail as part of the *ORV Management Plan* that is currently under development. All ORV use at the national seashore, including commercial visitor service providers, would be managed under this plan and the accompanying regulations. Management of ORV use at the national seashore will be consistent with Executive Order 11644, which states that “[a]reas and trails shall be located in the National Park System . . . only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.”

Under this alternative 8–10 of the historic structures in the Cape Lookout Village Historic District would be rehabilitated for occupancy by visitors. Management of these facilities for visitor use would be accomplished through a commercial service agreement similar to those in place for Great Island and Long Point. The opportunity to stay in these structures overnight would have some adverse impacts on wildlife. The impacts include increased light at night from the structures and an increase in potential food sources, particularly for scavengers. The mitigation measures that would be used to limit the impacts to wildlife associated with occupancy of the structures in the Cape Lookout Village Historic District were described in the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007). These measures include limiting outdoor lighting to what is necessary for health and safety purposes and shielding any lights in

the village to direct light toward the ground. In addition, all trash receptacles would be designed to prevent access by wildlife to decrease scavenging. The concessioner would be required to removal all trash from the island from concession operations.

Also, as part of the *Reuse Implementation Plan*, there would be localized removal of vegetation from around the historic structures to reduce the hazards from fire and storms as well as enhance historic views. These actions would be guided by the recommendations of the “Cape Lookout Village Cultural Landscape Report.” The recommendations in the report recognize the value of conserving wildlife habitat in the national seashore and suggest approaches for limiting the impacts on wildlife habitat that could potentially result from modifying vegetation in the historic district. The extent of any vegetation removal would be limited, and management efforts would focus first on removing aged and diseased plant material. The vegetation would be removed in phases, and the minimum amount of vegetation would be removed to recreate the historic views. No vegetation type would be completely removed from the project area. It is possible that some individuals from the local bird, mammal, or reptile populations could be lost during project implementation. The loss of these limited numbers of individuals would have negligible effects on the local population of any resident species on the island, and would not likely adversely impact ecosystem functions or biodiversity.

The impacts of the other actions described above, in combination with the impacts of alternative B, would result in negligible to minor cumulative adverse impacts in the long-term. Because of the limited number of commercial vehicles on the national seashore and mitigation measures to reduce impacts on wildlife in the Cape Lookout Village Historic District, the contribution of alternative B to the overall cumulative impacts on wildlife would be very small.

**Conclusion.** Under this alternative the long-term adverse impacts on wildlife from commercial service operations would range from negligible to moderate because of increased disturbance to habitat or disruption of important life activities.

The long-term adverse impacts associated with expanded land transportation options, including the availability of low-impact vehicle tours at the lighthouse, Great Island, and Long Point, would be negligible because the transportation would continue to occur in existing transportation corridors and visitors on the tours would be accompanied by a guide.

Dispersal of visitors across a wider area of the national seashore would have a minor to moderate adverse impact on wildlife because of the increased potential for intentional and unintentional harassment.

The long-term adverse impacts on wildlife associated with the increased availability of food from snack sales and the development of additional infrastructure at activity points on the national seashore would with mitigation be negligible to minor. The long-term adverse impacts from increasing the type of tours available to visitors would be negligible, and the impacts of extending the hours ferry service is available to and from the seashore would be negligible to minor.

The cumulative adverse impact on wildlife at the national seashore from implementing alternative B, together with the impacts of ORV use and the occupancy of the Cape Lookout Village Historic District, would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be very small.

There would be no impairment of the national seashore’s resources or values.

## Alternative C

The long-term adverse impacts on wildlife at the national seashore from implementing alternative C would be similar to the impacts from alternative B. The impacts associated with increased availability of land transportation from Cape Lookout, Great Island, and Long Point, and the guided low-impact vehicle tours from these locations, would be adverse but negligible in the long term.

The potential for both intentional and unintentional harassment of wildlife by visitors would be greater under alternative C than for alternative B because visitors would be able to rent low-impact vehicles for individual use without the benefit of a tour guide. Harassment of wildlife is particularly harmful during the breeding season because it could cause some species to leave a nest or young unattended and vulnerable and could cause a reduction in reproductive success. The long-term adverse impacts on individual animals would be moderate. The long-term adverse impacts to populations on the national seashore would vary depending on the species. Although these impacts could be partially mitigated as under alternative B with improved orientation information from commercial service providers, the long-term adverse impacts would be moderate.

A greater array of food items than under alternative B would be available to visitors from some commercial operations on the national seashore. More food items available would mean greater potential adverse impacts. This could result in increased availability of food for scavengers throughout the national seashore. Some wildlife species might become habituated to humans and their food and become pests. These behaviors can adversely affect the health of these species. To mitigate the adverse impacts on wildlife, the national seashore staff would increase outreach to visitors to make sure visitors remove their trash. The long-term adverse impacts to wildlife associated with the increased

availability of food on the national seashore would be negligible to minor.

In addition to facilities and infrastructure that would be developed under alternative B, the Gun Club or similar structures would be rehabilitated to allow for use by large groups. Mitigation measures would be implemented to reduce the potential impacts associated with new construction. These measures would include development of new facilities in areas that have been previously disturbed and scheduling activities to avoid seasons when species would be particularly vulnerable to disturbance. There would be minimal disturbance to wildlife or habitat associated with the rehabilitation of the group facilities because the facilities already exist. The long-term adverse impacts associated with facilities and infrastructure development and rehabilitation work would be negligible to minor.

The impacts on wildlife from increasing the type of tours available to visitors would be the same as for alternative B, adverse but negligible in the long term because visitors would be on tours designed to limit the impacts to resources and wildlife at the national seashore. The impact on wildlife from extending the hours of ferry service to and from the seashore would be the same as for alternative B, adverse and negligible to minor in the long term because the number of visitors would be relatively small and they would be concentrated in activity centers or on tours.

**Cumulative Effects.** Visitors to the national seashore could transport private vehicles to the seashore via concession-operated ferry service. These visitors use their vehicles for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. Visitors could access all areas of the national seashore via established routes except those closed for resource protection, safety reasons, or for proposed wilderness. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles

(ORVs) are transported by ferry to the national seashore each year. Disturbances to wildlife and their habitat that have resulted in a decline in populations have been associated with increased recreational use at the national seashore (NPS 2006a). These adverse impacts on wildlife from recreational uses including ORV use would continue under all alternatives analyzed in this *Commercial Services Plan*. The impacts on wildlife from current ORV use were analyzed in the *Interim Protected Species Management Plan* (NPS 2006a). The long-term adverse impacts on birds that are winter, fall, spring, and summer residents would be minor. The long-term adverse impacts on invertebrates in the intertidal zone would be negligible. The impacts from future ORV use at the national seashore will be analyzed in detail as part of the *ORV Management Plan* that is currently under development. All ORV use at the national seashore, including commercial visitor service providers, would be managed under this plan and the accompanying regulations. Management of ORV use at the national seashore will be consistent with Executive Order 11644, which states that “[a]reas and trails shall be located in the National Park System . . . only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.”

Under this alternative 8–10 of the historic structures in the Cape Lookout Village Historic District would be rehabilitated for occupancy by visitors. Management of these facilities for visitor use would be accomplished through a commercial service agreement similar to those in place for Great Island and Long Point. The opportunity to stay in these structures overnight would have some adverse impacts on wildlife. The impacts include increased light at night from the structures and an increase in potential food sources, particularly for scavengers. The mitigation measures that would be used to limit the impacts to wildlife associated with occupancy of the structures in the Cape

Lookout Village Historic District were described in the *Cape Lookout Village Historic Structures Reuse Implementation Plan* (NPS 2007). These measures include limiting outdoor lighting to what is necessary for health and safety purposes and shielding any lights in the village to direct light toward the ground. Also, all trash receptacles would be designed to prevent access by wildlife to decrease scavenging. The concessioner would be required to remove all trash from the island from concession operations.

Also, as part of the *Reuse Implementation Plan*, there would be localized removal of vegetation from around the historic structures to reduce the hazards from fires and storms as well as enhance historic views. These actions would be guided by the recommendations of the “Cape Lookout Village Cultural Landscape Report.” The recommendations in the report recognize the value of conserving wildlife habitat in the national seashore and suggest approaches for limiting the impacts on wildlife habitat that could potentially result from modifying vegetation in the historic district. The extent of any vegetation removal would be limited, and management efforts would focus first on removing aged and diseased plant material. The vegetation would be removed in phases, and the minimum amount of vegetation would be removed to recreate the historic views. No vegetation type would be completely removed from the project area. It is possible that some individuals from the local bird, mammal, or reptile populations could be lost during project implementation. The loss of these limited numbers of individuals would have negligible effects on the local population of any resident species on the island, and would not likely adversely impact ecosystem functions or biodiversity.

The impacts of the other actions described above, in combination with the impacts of alternative C, would result in negligible to minor cumulative adverse impacts in the long term. Because of the limited number of

commercial vehicles on the national seashore and mitigation measures to reduce impacts on wildlife in the Cape Lookout Village Historic District, the contribution of alternative C to the overall cumulative impacts on wildlife would be small.

**Conclusion.** Under this alternative the long-term adverse impacts on wildlife from commercial service operations would range from negligible to moderate because of increased disturbance to habitat or disruption of important life activities.

The long-term adverse impacts associated with expanded land transportation options, including the availability of low-impact vehicle tours at the lighthouse, Great Island, and Long Point, would be negligible because the transportation would continue to occur in existing transportation corridors and visitors on the tours would be accompanied by a guide.

The dispersal of visitors across a wider area of the national seashore would have a minor to moderate adverse impact on wildlife because of the increased potential for intentional and unintentional harassment.

The availability of low-impact vehicles for personal use without the benefit of a tour

guide would have a long-term moderate adverse impact on wildlife at the national seashore because of the increased potential for intentional and unintentional harassment of wildlife.

The long-term adverse impacts on wildlife associated with the increased availability of food items at the national seashore and the development of new facilities and the rehabilitation of the Gun Club or other group facilities would be negligible to minor.

The long-term adverse impacts from increasing the type of tours available to visitors would be negligible, and the impacts of extending the hours ferry service is available to and from the seashore would be negligible to minor.

The cumulative adverse impact on wildlife at the national seashore from alternative C, together with the impacts of ORV use and the occupancy of the Cape Lookout Village Historic District, would be adverse and negligible to minor in the long term. The contribution of this alternative to the overall cumulative impacts would be small.

There would be no impairment of the national seashore's resources or values.

## SOCIOECONOMIC ENVIRONMENT

### METHODOLOGY

Socioeconomic impacts were determined based on applied logic, professional expertise, and professional judgment. The factors considered to identify and discuss potential impacts were economic data, historic visitor use data, expected future visitor use, and future NPS developments within the national seashore. A mostly qualitative analysis was completed given the available data. However this is sufficient to compare and disclose the impacts of alternatives for decision-making purposes.

Potential impacts to the socioeconomic environment are described in terms of context, duration, and intensity. The definitions of context, impact intensity, and duration for the local and regional economy are described below.

#### Context

**Local:** Impacts that affect businesses or individuals located mostly in towns or communities adjacent to the national seashore's boundary, such as Beaufort, Harkers Island, Davis, Morehead City, Ocracoke, Atlantic, Smyrna, and Cedar Island.

**Regional:** Impacts that affect businesses or individuals mostly within Carteret County. Local impacts are also a part of the regional impacts.

#### Intensity Definitions

**Negligible:** The effects on socioeconomic conditions are below or just barely at the level of detection.

**Minor:** The effects on socioeconomic conditions are small but detectable and only affect a small number of firms and/or

a small portion of the population. The impact is slight and not detectable outside the affected area.

**Moderate:** The effects on socioeconomic conditions are readily apparent. Any effects result in changes to socioeconomic conditions on a local scale (e.g., a nearby town or community) within the affected area.

**Major:** The effects on socioeconomic conditions are readily apparent. Measurable changes in social or economic conditions at the county level would occur. The impact is severely adverse or exceptionally beneficial within the affected area.

#### Duration of Impact

**Short term** identifies a definite period of time during which beneficial or adverse impacts occur that have a limited lifetime of three years (or less) or the time it takes for a contracted piece of work, services, or purchase of goods to be completed; e.g., building a visitor center has a short-term impact during which funds are expended beginning with design and construction and ending with opening the visitor center to the public. In some instances a short-term impact could last longer than three years, but it would have a finite lifetime.

**Long term** refers to a period of time during which beneficial or adverse impacts occur that have an open-ended or unlimited lifetime. Hiring NPS staff and providing annual operating funds is an on-going, long-term, open-ended commitment providing benefits that would occur for the life of the national seashore, i.e., indefinitely.

## **IMPACTS OF IMPLEMENTING ALTERNATIVE A — NO ACTION**

### **Regional and Local Economy**

Cape Lookout National Seashore would continue to be an important attraction within Carteret County and to visitors from all over the country. The national seashore would remain a primary visitor destination, key to the regional tourism industry. Some local and regional businesses and their employees would continue to benefit from tourism spending as visitors travel to the national seashore. There would continue to be long-term beneficial impacts on the local and regional economy wherever businesses serve visitors to the national seashore. These businesses are in towns/townships such as Beaufort, Davis, Atlantic, Morehead City, Harkers Island, Smyrna, Ocracoke, and Cedar Island.

Letting contracts and entering into commercial use authorizations to provide goods and services necessary for the enjoyment and safety of visitors would be expected to continue as in the past. Competition among private sector firms in the summer and limited service at other times (shoulder seasons and winter) would continue. There would continue to be some business opportunities for a few firms and their employees based upon providing ferry services, lodging, food, and other goods and services within the national seashore. Local firms operating as holders of contracts and commercial use authorizations within the national seashore would be expected to continue much as they have in the past and would continue to benefit from use of the national seashore's natural and cultural resources, facilities, and infrastructure. NPS actions would have long-term beneficial impacts on businesses and their employees at the local and regional level.

Business firms that currently provide goods and services via concession contracts benefit from the profits they receive, and their

employees benefit from their wages and salaries. These benefits continue for the duration of the contract, the operating season, or length of employment.

Most CUA (commercial use authorization) firms operate from year to year, and the employment opportunities they offer are seasonal. Many of their employees are college students or others looking for temporary work. Employees come and go, only some working more than a few seasons. From season to season individual businesses would continue to enter and leave the local market depending upon their profits, ability to compete, and demand for their goods and services. Benefits would be short term and would vary depending upon one's viewpoint, expectations, and whether it was a good season or poor season.

The provision of goods and services via contracts and commercial use authorizations has sometimes resulted in inadequate service to the public. These problems might worsen over time under continuation of current management, which could result in fewer visitors using the services. NPS administrative operations relating to concessions contract and CUA management are not optimized, resulting in the visiting public not being served at the highest level possible by private sector businesses operating within the national seashore. Over the long term, the Park Service could fail to adequately provide for the public's enjoyment of national seashore resources, which could result in a decrease in visitation and fewer tourism dollars going into the economy. These adverse impacts would be local, moderate, and long term to business owners and minor and long term to the county's economy.

### **Concession Contracts and Commercial Use Authorizations**

NPS efforts under alternative A would be essentially as they are now — a variety of

concession contracts and commercial use authorizations would be let or renewed as they have been in the past, and various goods and services would continue to be provided according to the requirements of the contracts or commercial use authorizations. Continuing to provide revenue and employment from these contracts and authorizations would be a long-term beneficial impact.

### **Costs of Implementing this Alternative**

This alternative also calls for maintaining the NPS staffing equivalent of 0.5 employee (annual cost \$42,000) to continue managing the concessions contract and CUA program. No new maintenance/operations actions would result from implementation. Other than accounting for inflation, actions in alternative A would not result in additional revenue above current levels from national seashore expenditures going into the economy. This small annual increase in labor income (\$42,000) would be a local, long-term, negligible impact.

### **Cumulative Effects**

Fourteen structures in the Cape Lookout Village Historic District would be stabilized and/or rehabilitated. Other NPS actions include the shoreline protection project and recent construction of a new comfort station, visitor contact station, new water line, 75-car public parking area, and new sections of boardwalk at the Cape Lookout Visitor Orientation Area. These NPS actions would result in local to regional expenditures and have short-term beneficial impacts on the economy, mostly in the construction industry. Rapidly escalating land prices in the county, particularly along the waterfront, could result in decreased opportunities for new commercial services providers to establish businesses. High costs for land at existing and potential departure points could negate expected profit margins and make it more desirable for

landowners to sell to developers. The impact of the above actions, combined with the actions of alternative A, would result in long-term minor adverse cumulative impacts on the socioeconomic environment. The contribution of this alternative to the cumulative impacts would be small.

### **Conclusion**

Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. These impacts would be short and long term on a local and regional county-wide basis for most businesses and their employees. The limited ability of the Park Service to fully provide for the public's enjoyment of national seashore resources could have long-term minor to moderate adverse impacts for the county's economy and business owners respectively. The impacts of other actions, together with the impacts of alternative A, would result in short- and long-term moderate adverse cumulative effects. The contribution of this alternative to cumulative impacts would be small.

## **IMPACTS OF IMPLEMENTING ALTERNATIVE B**

### **Regional and Local Economy**

Cape Lookout National Seashore would continue to be an important attraction within Carteret County and to visitors from all over the country. The national seashore would remain a primary visitor destination, key to the regional tourism industry. Letting contracts and entering into commercial use authorizations to provide goods and services necessary for the enjoyment and safety of the visitors to the national seashore would be expected to continue. Expanded access and

diversity of recreational activities could attract more visitors to the national seashore. These NPS actions have beneficial and long term impacts on the local economy wherever businesses serve visitors to the national seashore. These businesses are in towns/ townships such as Beaufort, Davis, Atlantic, Morehead City, Harkers Island, Smyrna, Ocracoke, and Cedar Island.

Successful providers and their employees would benefit from long-term contracts. (Concession contracts generally have a term of 10 years). Businesses would be able to make long-term plans for investing in capital improvements and would be more stable. Most employment opportunities would remain seasonal, but employers and employees could make long-term plans to return year after year.

Facilities serving the public would also be enhanced with some physical improvements being paid for by the Park Service and some being paid for by the private concessioners as part of their contracts with the Park Service. Facility improvements would result in one-time costs of \$550,000. These would be short-term, local to regional expenditures with beneficial impacts mostly in the construction industry.

### **Concession Contracts and Commercial Use Authorizations**

The concession contracts and commercial use authorizations would be revised to call for improvements in a wide range of goods and services. The revision of the concessions contracts and commercial use authorizations by grouping them geographically to provide a wider variety of goods and services by private sector businesses would lead to improved services all around. If the previous situation of approximately two concessions contracts and 12 commercial use authorizations were replaced by fewer contracts and authorizations, the selected private firms would be able

to achieve some economies of scale regarding labor and administrative costs by offering a variety of services from one location. Firms and their employees that successfully compete to become concession contract holders would benefit. At the local level profits would accrue for these firms and there would be steady seasonal employment and reliable wages and salaries for their employees. Those firms (and their employees) that were awarded contracts would experience long-term benefits for the duration of the contract or the length of employment.

The Park Service would have fewer providers and fewer and better contracts and commercial use authorizations to administer, and the public would receive an improved level of service. Improved levels of service could result in increased visitation to the national seashore, with a corresponding benefit to the economy, but there would be adverse impacts on firms not successful in winning contracts.

Long term beneficial impacts on the local and regional economy would occur due to NPS concession contract and CUA actions.

### **Costs of Implementing the Alternative**

Annual maintenance items currently cost \$95,000. If an equivalent of 2.5 full-time employees (annual cost \$113,000) were added to the NPS staff to accomplish the additional workload, the present-day value of recurring costs (current maintenance plus salary for additional employees during the life of the national seashore) would be \$4,230,000<sup>1</sup>. These are long-term, regional to local expenditures with beneficial impacts. The estimated total cost of alternative B would be \$4,780,000.<sup>2</sup>

<sup>1</sup> Where the interest rate  $i = 4.875\%$ , the number of years  $n = 100$ , and the payment  $pmt = \$208,000$ . The present value was rounded to the nearest \$1,000.

<sup>2</sup> Includes infrastructure costs of \$550,000 and reoccurring costs of \$4,230,000.

### **Cumulative Effects**

Fourteen structures in the Cape Lookout Historic District would be stabilized and/or rehabilitated. Other NPS actions include the shoreline protection project and recent construction of a new comfort station, visitor contact station, water line, 75-car public parking area, and sections of boardwalk at the Cape Lookout visitor orientation area. These NPS actions result in local to regional expenditures and have short-term beneficial impacts on the economy, mostly in the construction industry. Rapidly escalating land prices in the county, particularly along the waterfront, could result in decreased opportunities for new commercial services providers to establish businesses. High costs for land at existing and potential departure points could negate expected profit margins and make it more desirable for landowners to sell to developers. The impacts of the above actions, combined with the impacts of implementing alternative B, would result in overall long-term beneficial cumulative impacts on the socioeconomic environment. The contribution of this alternative to these cumulative impacts would be modest.

### **Conclusion**

Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. Improved services and expanded access could increase visitation and benefit the concession providers and local and regional economies exponentially. These impacts would be beneficial and long term on a local and regional county-wide basis for most businesses and their employees. Facility improvements and maintenance costs would have long-term beneficial impacts on the regional and local economies. The impacts of proposals in alternative B, together with the

impacts of other actions described above, would result in overall long-term beneficial cumulative impacts.

## **IMPACTS OF IMPLEMENTING ALTERNATIVE C**

### **Regional and Local Economy**

Cape Lookout National Seashore would continue to be an important attraction within Carteret County and to visitors from all over the country. The national seashore would remain a primary visitor destination, key to the regional tourism industry. Letting contracts and entering into commercial use authorizations to provide goods and services necessary for the enjoyment and safety of the visitors to the national seashore would be expected to continue. Expanded access and diversity of recreational activities could attract more visitors to the national seashore. These NPS actions would have beneficial and long term impacts on the local economy wherever businesses serve visitors to the national seashore. These businesses are in towns/ townships such as Beaufort, Davis, Atlantic, Morehead City, Harkers Island, Smyrna, Ocracoke, and Cedar Island.

Facilities serving the public would be improved or developed, and the Gun Club facility would be rehabilitated for use as a large group facility, perhaps run by a commercial services provider. The national seashore also would explore the possibility of concession-operated overnight use at Portsmouth Village. Physical improvements would be paid for by the Park Service and some could be paid for by the private concessioners as part of their contracts with the Park Service.

Facility improvements would be estimated at \$1,745,000. (This does not include costs for rehabbing structures at Portsmouth because this alternative only calls for exploring that option.) These would be one-time costs that would be short-term, local to regional

expenditures with beneficial impacts, mostly in the construction industry.

### **Concession Contracts and Commercial Use Authorizations**

The concession contracts and commercial use authorizations would be revised to call for improvements in a wide range of goods and services. Grouping the concessions contracts and commercial use authorizations by geographical location to provide a wider variety of goods and services by private sector businesses would lead to improved services all around. If the previous situation of approximately two concessions contracts and 12 commercial use authorizations were replaced by fewer contracts and authorizations, the selected private firms would be able to achieve some economies of scale regarding labor and administrative costs by offering a variety of services from one location.

The Park Service would have fewer providers and fewer and better contracts and commercial use authorizations to administer, and the public would receive an improved level of service. Improved levels of service could result in increased visitation to the national seashore, with a corresponding benefit to the economy. Impacts on the local and regional economy due to NPS concession contract and CUA actions would be beneficial and long term in duration.

Firms and their employees that successfully compete to become concession contract holders would benefit. At the local level profits would accrue for these firms, and there would be steady seasonal employment and reliable wages and salaries for their employees. Those firms (and their employees) that were awarded contracts would experience long-term benefits for the duration of the contract or the length of employment.

### **Costs of Implementing this Alternative**

Annual maintenance items currently cost \$95,000. If NPS staff were increased by the equivalent of 3.5 full-time employees (annual cost \$141,000) to accomplish the additional workload, the present value of annual costs (current maintenance plus salary for additional employees during the life of the national seashore) would be \$4,800,000<sup>3</sup>. These would be long-term, local to regional expenditures with beneficial impacts. The estimated total cost of alternative C would be \$6,545,000.<sup>4</sup>

### **Cumulative Effects**

Fourteen structures in the Cape Lookout Historic District would be stabilized and/or rehabilitated. Other NPS actions include the ongoing shoreline protection project and recent construction of a new comfort station, visitor contact station, water line, 75-car public parking area, and sections of boardwalk at the Cape Lookout visitor orientation area. These NPS actions result in local to regional expenditures and have short-term beneficial impacts on the economy, mostly in the construction industry. Rapidly escalating land prices in the county, particularly along the waterfront, could result in decreased opportunities for new commercial services providers to establish businesses. High costs for land at existing and potential departure points could negate expected profit margins and make it more desirable for landowners to sell to developers. The impacts of the above actions, combined with the impacts of implementing alternative C, would result in overall long-term beneficial cumulative impacts on the socioeconomic environment. The contribution of this alternative to these cumulative impacts would be modest.

<sup>3</sup> Where the interest rate  $i = 4.875\%$ , the number of years  $n = 100$ , and the payment  $pmt = \$236,000$ . The present value was rounded to the nearest \$1,000.

<sup>4</sup> Includes infrastructure costs of \$1,745,000 and reoccurring costs of \$4,800,000.

### **Conclusion**

Expenditures by visitors traveling to the national seashore would continue to have beneficial effects on the local and regional economies, and concession contract and CUA holders would continue to benefit financially from providing necessary and appropriate services. Improved services and expanded access could increase visitation and benefit the concession providers and local and regional economies exponentially. These

impacts would be minor and long term on a regional county-wide basis, but at the local level they would be minor to moderate for most businesses and their employees. Facility improvements would have short- and long-term beneficial impacts to the regional economy, mostly in the construction industry.

The impacts of proposals in alternative C, together with the impacts of other actions described above, would result in long-term overall beneficial cumulative impacts.

## NPS OPERATIONS AND FACILITIES

### METHODS AND ASSUMPTIONS FOR ANALYZING IMPACTS

The impact analysis evaluated the effects of the alternatives on the following aspects of national seashore operations:

- staffing, facilities and maintenance, and concessions management
- operations of non-NPS entities, especially commercial service providers

The analysis was conducted in terms of how facilities and operations at the national seashore might vary under the different management alternatives. The analysis is qualitative rather than quantitative because of the conceptual nature of the alternatives. Consequently, professional judgment was used to reach reasonable conclusions as to the intensity, duration, and type of potential impact.

#### Intensity Definitions

**Negligible** — Operations at the national seashore would not be affected or the effect would be at or below the lower levels of detection and would not have an appreciable effect on NPS operations.

**Minor** — The effects would be detectable, but would be of a magnitude that would not have an appreciable effect on NPS operations.

**Moderate** — The effects would be readily apparent and would result in a substantial change in national seashore operations in a manner noticeable to staff and the public.

**Major** — The effects would be readily apparent and would result in a substantial change in seashore operations in a manner noticeable to staff and the public and be markedly different from existing operations.

#### Duration of Impact

Short-term impacts would be less than one year because most construction is generally completed within a year's time and would last only until all construction-related items were completed. Long-term impacts would extend beyond one year and have a permanent effect on operations.

### ALTERNATIVE A

#### Facilities and Maintenance

Under this alternative, the National Park Service would continue to maintain all facilities and infrastructure at the national seashore and there would be no change in vehicle access or the availability of land transportation on the North and South Core Banks. Maintenance of facilities and roads would continue to have a long-term, adverse, and negligible to minor impact on NPS operations because maintenance activities would continue at approximately the same level of effort and would be concentrated in the activity areas. The impacts to facilities and resources at the national seashore would continue to be greater than the revenue provided from commercial services at the national seashore. This disparity would continue to have a long-term adverse minor impact on facilities maintenance at the national seashore and on NPS operations.

As resources allow, the national seashore would retrofit or develop new docks at primary departure and arrival points at the national seashore, including the environmental education facilities at the Les and Sally Moore House to accommodate visitors with limited mobility. The National Park Service anticipates that most dock facilities could be retrofitted and that few if any new dock facilities would be needed. The short-term

impacts on operations, particularly staff time and the budget, would be adverse and negligible to minor depending on the level of effort required to make the docks accessible. If it becomes necessary to develop new docks appropriate environmental compliance actions would be completed at that time. The long term impacts on operations would be negligible and adverse.

### Staffing

Under this alternative there would be no additional staff assigned to the management of commercial services at the national seashore.

Management of commercial services would continue to require more time than if coordinated by a single staff person. There would continue to be a minor, long-term adverse impact on NPS operations because these activities would take time away from other tasks.

Under this alternative there would be no change in natural and cultural resource monitoring and management actions outside of the activity zones. Because most visitors would continue to remain near activity centers at the national seashore, there would be limited impacts to resources outside these areas. Natural and cultural resource monitoring and management would continue to have a negligible adverse impact on NPS operations.

### Management of Commercial Services

Management of commercial use authorizations, particularly the ferry operations, would continue to take considerable staff time to coordinate with all the operators and ensure compliance with NPS and Coast Guard requirements and regulations. These actions would continue to have a long-term, minor, adverse impact on operations at the national seashore.

To improve management of commercial services in general, the Park Service would establish benchmarks for level of service provided to visitors and develop uniform approaches to reporting. These efforts would include the following:

- The National Park Service would specify uniform standards for facilities available to ferry passengers, including facilities to assist passengers with limited mobility and visibility of appropriate NPS materials such as brochures. There would be a minor, short-term, adverse impact on operations associated with increased monitoring for compliance with these requirements. Over time, as compliance with these requirements increased, the level of effort required to monitor for compliance would be reduced, a long-term benefit for NPS operations. In addition, because NPS materials would be more readily available to visitors arriving by ferry, these visitors would be more aware that they are about to enter a unit of the national park system and adverse impacts on resources attributable to visitors would be reduced, a long-term benefit to NPS operations.
- The National Park Service would establish a Web site to receive feedback about commercial service providers at the national seashore. The short-term impacts on operations would be adverse and minor because of the time associated with establishment of the Web program. In the long term, the Web program would be a benefit to NPS operations because it would assist in management and oversight of commercial service operators at the seashore.
- The National Park Service would increase monitoring to ensure compliance with Coast Guard regulations relative to noise, emissions standards, and health and safety regulations. The Park Service would also ensure that background checks had been completed for commercial service staff who come into contact with visitors.

Short-term adverse minor to moderate impacts would occur because of increased monitoring and possible coordination of enforcement actions if any are required. Long-term benefits would occur as operators comply with Coast Guard regulations.

## **Revenue**

The number of and type of commercial service operations would remain relatively constant over the long term. Changes to the number of commercial operations would be in response to adverse impacts on the natural and cultural resources at the national seashore. There would be minimal to no changes in the fee structure for commercial use authorizations and contracts at the national seashore. The revenue to the national seashore would continue to be less than the economic value of the facilities used by commercial use operators and the costs of mitigating the impacts associated with their use. These impacts would continue to be adverse and minor to moderate in the long term.

## **Cumulative Impacts**

There would continue to be impacts on operations and natural and cultural resources from visitors who do not arrive at the national seashore on a commercial ferry and/or who use their own vehicle while at the national seashore. Most visitors arrive by commercial ferry, but most vehicle traffic is from private vehicles. Private vehicles are used for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. These visitors could access all areas of the national seashore via established routes except those closed for resource protection, safety reasons, or for proposed wilderness. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles

(ORVs) are transported to the national seashore each year. There is the potential for both intentional and unintentional impacts to natural and cultural resources by visitors who do not arrive by commercial ferry and/or who use their own vehicles for transport in the national seashore. These impacts to resources could require the national seashore to expend additional staff time for enforcement and monitoring actions. Under alternative A, most visitors who disperse across the national seashore away from activity areas would do so in private vehicles. Use of the roads by private vehicles and the intentional and unintentional adverse impacts on natural and cultural resources, facilities, and infrastructure would continue to have an adverse minor to moderate long-term impact on operations at the national seashore.

As resources allow, NPS maintenance staff would stabilize and rehabilitate for occupancy the historic structures in the Cape Lookout Village Historic District for both NPS staff and volunteers and visitors through a concession operation (NPS 2006a). In addition to work on the structures, the maintenance staff would install the water, centralized waste water treatment, and electrical infrastructure necessary to support occupancy of the structures. Other actions include relocation of three structures to their original locations as well as the selective removal of vegetation in the Cape Lookout Village Historic District. The long-term adverse impacts on national seashore operations would be moderate primarily because of the additional work required by the maintenance staff.

The maintenance staff would continue to support staff and volunteers by transporting them to the mainland or to the national seashore using NPS boats. As the number of staff and volunteers in the Cape Lookout Village Historic District increases, the amount of support would increase. However because the NPS staff go back and forth from the mainland to the national seashore with some frequency the impact on NPS operations

would be adverse but negligible in the long term.

The impacts of the actions described above, in combination with the impacts of alternative A would result in total cumulative adverse impacts of minor to moderate intensity in the long term. Given the minimal dispersal of visitors outside the activity areas, the contribution of alternative A of this *Commercial Services Plan* to the overall cumulative impacts on operations would be very small.

### **Conclusion**

Under alternative A, the no action alternative, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance, management of commercial service operations at the national seashore, and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the seashore. Once the benchmarks and monitoring were in place, the impact on NPS operations would be beneficial. The impacts to operations associated with shortfalls in revenue would continue to be adverse and minor to moderate in the long term.

The cumulative impacts on NPS operations, including the commercial services described for alternative A, would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be very small.

## **ALTERNATIVE B**

### **Facilities and Maintenance**

The impacts on national seashore operations associated with maintaining all facilities used by commercial service operators at the seashore would be the same as for alternative A — adverse, long term, and minor. As under

alternative A, the National Park Service would retrofit or develop new docks to accommodate visitors with limited mobility, a long-term negligible, adverse impact on maintenance of NPS facilities. If it becomes necessary to develop new docks, appropriate environmental compliance actions would be completed at that time.

If some commercial use authorizations were converted to contracts, the national seashore would have additional revenue to offset maintenance and other costs associated with use of the facilities at the national seashore by commercial operators and visitors, a long-term benefit for NPS operations.

Because on-island transportation would operate on a more frequent basis and cover a larger area of the national seashore, there would be increased need for road maintenance. However, even though land transportation would run more frequently, it would remain a small fraction of the total use of the roads on the national seashore so the adverse impacts would be negligible to minor in both the short and long term compared to the no-action alternative.

### **Staffing**

Under this alternative there would be an increase in natural and cultural resource monitoring and enforcement activities compared to the no-action alternative because visitors would be spread over a larger area of the national seashore. However, adverse impacts would be partially mitigated because participants in the low-impact vehicle tours would be accompanied by a trained guide who would be familiar with NPS regulations. The adverse impact on resource management and enforcement would be negligible to minor in the long term.

Additional staff would be necessary to fully implement this alternative. The additional staff would be needed for interpretation, law

enforcement, and concessions management. Additional interpretive staff would allow more time to provide interpretive training to commercial service operators without compromising current interpretive programs. Additional law enforcement staff would allow for additional monitoring and enforcement activities throughout the national seashore. Consolidating concessions management responsibilities with a single staff person would reduce the amount of coordination necessary to efficiently and effectively run the program. The additional staff would be a long-term benefit to NPS operations.

### **Management of Commercial Services**

Under alternative B, the preferred alternative, the impacts on commercial services management associated with establishment of uniform reporting requirements and monitoring of commercial operator performance would be the same as for alternative A, beneficial in the long term.

Under this alternative the overall number of commercial service providers could be reduced. Decreasing the number of commercial entities in the national seashore would enable more effective management of the commercial operations that remain. One staff person would be responsible for managing all commercial services at the national seashore. This would reduce the amount of staff coordination necessary to manage commercial service operations — a long-term benefit for NPS operations because staff could give greater attention to other tasks.

Commercial service providers would be required to attend interpretive training provided by NPS staff. This would enable commercial service providers to give visitors who arrive at the national seashore via ferry or other commercial means (e.g., kayak and other types of tours) appropriate orientation and interpretive information. Under this alternative more visitors would have the

opportunity to disperse over greater distances from activity centers at the national seashore. However, visitors who have received information about the national seashore would be less likely to engage in activities that would adversely impact national seashore resources. There would be a short-term adverse minor impact on staffing associated with these operational changes because of the time necessary to develop programs and provide training. In the long term the impact on operations would be adverse but negligible because of the efficiencies associated with these changes.

### **Revenue**

The number of and type of commercial service operations would change over the long term. It is expected that the revenue from commercial operations would increase over time. Eighty percent of franchise fees would be retained by the national seashore for visitor services and resource protection projects. This revenue would contribute to projects that would offset some adverse impacts associated with commercial services on operations at the national seashore. The increase in revenue for visitor services and resource protection projects would have a long-term beneficial impact on operations at the national seashore.

### **Cumulative Impacts**

There would continue to be impacts on operations and natural and cultural resources from visitors who do not arrive at the national seashore on a commercial ferry and/or who use their own vehicle while at the national seashore. Most visitors arrive by commercial ferry, but most vehicle traffic is from private vehicles. Private vehicles are used for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. These visitors could access all areas of the national

seashore via established routes except those closed for resource protection, safety reasons, or for proposed wilderness. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles (ORVs) are transported to the national seashore each year. There is the potential for both intentional and unintentional impacts to natural and cultural resources by visitors who do not arrive by commercial ferry and/or who use their own vehicles for transport in the national seashore. These impacts to resources could require the national seashore to expend additional staff time for enforcement and monitoring actions. Under alternative A, most visitors who disperse across the national seashore away from activity areas would do so in private vehicles. Use of the roads by private vehicles and the intentional and unintentional adverse impacts on natural and cultural resources, facilities, and infrastructure would continue to have an adverse minor to moderate long-term impact on operations at the national seashore.

As resources allow, NPS maintenance staff would stabilize and rehabilitate the historic structures in the Cape Lookout Village Historic District for occupancy for both NPS staff and volunteers and visitors through a concession operation (NPS 2006a). In addition to work on the structures, the maintenance staff would install the water, centralized waste water treatment, and electrical infrastructure necessary to support occupancy of the structures. Other actions include relocation of three structures to their original locations as well as the selective removal of vegetation in the Cape Lookout Village Historic District. The long-term adverse impacts on national seashore operations would be moderate primarily because of the additional work required by the maintenance staff.

The maintenance staff would continue to support staff and volunteers by transporting them to the mainland or to the national seashore using NPS boats. As the number of

staff and volunteers in the Cape Lookout Village Historic District increases the amount of support would increase. However because the NPS staff go back and forth from the mainland to the seashore with some frequency the impact on NPS operations would be adverse but negligible in the long-term.

The impacts of the actions described above, in combination with the impacts of alternative B would result in total cumulative adverse impacts of minor to moderate intensity in the long term. Given the minimal dispersal of visitors outside the activity areas, the contribution of alternative B of this *Commercial Services Plan* to the overall cumulative impacts to operations would be small.

### Conclusion

Under alternative B, the preferred alternative, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance. There would be a long-term benefit to NPS operational activities associated with the conversion of commercial use authorizations to contracts and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the national seashore. Visitors would have the opportunity to disperse over a larger area of the national seashore, but because visitors arriving at the seashore with a commercial service provider would have received appropriate orientation and interpretive information the long-term adverse impacts on operations would be negligible. The increases in interpretive and law enforcement staff and the assignment of a single staff person to manage commercial services would be a long-term benefit to NPS operations. The increase in revenue from commercial service operations would offset some adverse impacts on the operations at the national seashore and would have a long term beneficial impact.

The cumulative impacts on NPS operations, including the commercial services described above for this alternative would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be small.

## **ALTERNATIVE C**

### **Facilities and Maintenance**

The impacts on NPS operations associated with maintaining all facilities used by commercial service operators at the national seashore would be greater than alternative A. As under alternative A, the National Park Service would retrofit or develop new docks to accommodate visitors with limited mobility, a long-term negligible, adverse impact on maintenance of NPS facilities. If it becomes necessary to develop new docks, appropriate environmental compliance actions would be completed at that time. As resources allow, the Gun Club would be rehabilitated and made available for use by large groups. Use of the Gun Club would increase the number of facilities requiring maintenance at the national seashore. Depending on the level of use, the impact of facility maintenance on operations would be adverse and minor to moderate in the long term.

If some commercial use authorizations were converted to contracts, the national seashore would have additional revenue to offset the maintenance and other costs associated with use of the facilities at the national seashore by commercial operators and visitors, a long-term benefit for NPS operations.

Because on-island transportation would operate on a more frequent basis and cover a larger area of the national seashore, there would be increased need for road maintenance. However even though land transportation would run more frequently it would remain a small fraction of the total use of the

roads on the seashore so the adverse impacts would be negligible to minor in both the short and long term as compared to the no-action alternative.

### **Staffing**

Under this alternative there would be an increase in natural and cultural resource monitoring and enforcement activities compared to the no-action alternative because visitors would be spread over a larger area of the national seashore. Under this alternative visitors could rent low-impact vehicles and not participate in organized tours. Because these visitors would not be accompanied by a trained guide, who would be familiar with park regulations, the impact on resource monitoring and law enforcement actions would be greater than under alternative B. The potential adverse impacts could be reduced by requirements that visitors receive appropriate orientation and interpretive information from commercial service providers. The adverse impact on resource management and enforcement would be minor in the long term.

The number of additional staff necessary to implement this alternative would be slightly more than for alternative B. The additional staff would be necessary to accomplish the increased level of interpretation, monitoring, and law enforcement and to have an increased presence at departure points on the mainland. The additional staff would be a long-term benefit to NPS operations.

### **Management of Commercial Services**

Under alternative C the impacts on commercial services management associated with establishment of uniform reporting requirements and monitoring of commercial operator performance would be the same as for alternative A, beneficial in the long term.

Like alternative B, overall number of commercial service providers could be reduced, which would enable more effective management of the commercial operations that remain. Because only one staff person would be responsible for managing all commercial services, the amount of coordination necessary to manage the program would be reduced. Commercial service providers would be required to attend interpretive training, which would enable them to provide appropriate orientation and interpretive information. Although visitors would be more dispersed across the national seashore, the increase in resources monitoring would not be expected to increase dramatically because visitors who have received information about the national seashore would be less likely to engage in activities that would adversely impact national seashore resources. There would be a short-term adverse minor impact on staffing associated with these operational changes because of the time necessary to develop programs and provide training. In the long term the impact on operations would be adverse but negligible because of the efficiencies associated with these changes.

### Revenue

The impacts from this alternative on revenue to the national seashore would be similar to alternative B, a long-term benefit to operations at the seashore. There would be an increase in the types of commercial services available to visitors, particularly with respect to dispersal of visitors across the seashore. Dispersal of visitors would increase the need for natural and cultural resource monitoring. There would be an increase in revenue from additional commercial services at the seashore to support the additional resource protection activities.

### Cumulative Impacts

There would continue to be impacts on operations and natural and cultural resources from visitors who do not arrive at the national seashore on a commercial ferry and/or who use their own vehicle while at the national seashore. Most visitors arrive by commercial ferry, but most vehicle traffic is from private vehicles. Private vehicles are used for a variety of recreational activities, including recreational fishing, sightseeing, travel to and from camping areas, and pleasure driving. These visitors could access all areas of the national seashore via established routes except those closed for resource protection, safety reasons, or for proposed wilderness. Use of private vehicles has increased over time, and it is estimated that up to 5,500 off-road vehicles (ORVs) are transported to the national seashore each year. There is the potential for both intentional and unintentional impacts to natural and cultural resources by visitors who do not arrive by commercial ferry and/or who use their own vehicles for transport in the national seashore. These impacts to resources could require the national seashore to expend additional staff time for enforcement and monitoring actions. Under alternative C, most visitors who disperse across the national seashore away from activity areas would do so in private vehicles. Use of the roads by private vehicles and the intentional and unintentional adverse impacts on natural and cultural resources, facilities, and infrastructure would continue to have an adverse minor to moderate long-term impact on operations at the national seashore.

As resources allow, NPS maintenance staff would stabilize and rehabilitate the historic structures in the Cape Lookout Village Historic District for occupancy by both NPS staff and volunteers and visitors through a concession operation (NPS 2006a). In addition to work on the structures the maintenance staff would install the water, centralized waste water treatment, and electrical infrastructure necessary to support occupancy of

the structures. Other actions include relocation of three structures to their original locations as well as the selective removal of vegetation in the Cape Lookout Village Historic District. The long-term adverse impacts on national seashore operations would be moderate primarily because of the additional work required by the maintenance staff.

The maintenance staff would continue to support staff and volunteers by transporting them to the mainland or to the national seashore using NPS boats. As the number of staff and volunteers in the Cape Lookout Village Historic District increases, the amount of support would increase. However because the NPS staff go back and forth from the mainland to the national seashore with some frequency the impact on NPS operations would be adverse but negligible in the long-term.

The impacts of the actions described above, in combination with the impacts of alternative C would result in total cumulative adverse impacts of minor to moderate intensity in the long term. Given the greater dispersal of visitors outside the activity areas, the contribution of alternative C of this *Commercial Services Plan* to the overall cumulative impacts on operations would be appreciable.

## Conclusion

Under alternative C, there would continue to be long-term adverse minor impacts on NPS operations associated with facility and infrastructure maintenance. There would be a long-term benefit to NPS operational activities associated with the conversion of commercial use authorizations to contracts and the establishment of benchmarks and monitoring to provide an appropriate level of service to all visitors using commercial services at the national seashore. Visitors would have the opportunity to disperse over a larger area of the national seashore. Even though visitors arriving at the national seashore with a commercial service provider would have received appropriate orientation and interpretive information, the long-term adverse impacts from individual use of low-impact vehicles on operations would be minor. The increases in interpretive and law enforcement staff and the assignment of a single staff person to manage commercial services would be a long-term benefit to NPS operations.

The cumulative impacts on NPS operations including the commercial services described in this alternative would be adverse and minor to moderate in the long term. This alternative's contribution to these impacts would be appreciable.

## CONSULTATION AND COORDINATION

During the preparation of this *Commercial Services Plan and Environmental Assessment /Assessment of Effect*, the Park Service has consulted with public agencies, organizations, and individuals having a stake in the project.

Cape Lookout National Seashore, the NPS Southeast Regional Office, and the NPS Denver Service Center staff participated in internal and public project scoping in May 2006.

Two public meetings were held to announce the start of the planning project, and a comment form was distributed to the national seashore's mailing list. The comment form requested feedback from members of the public regarding (1) what they value about the national seashore, (2) the types of activities and commercial services support they would like to see in the future, and (3) concerns they have about planning for commercial services.

A total of 35 people attended the meetings and provided more than 200 comments. More than 50 comment forms were received from members of the public. Comment topics included appreciation for the beauty of the natural environment and keeping the national seashore pristine and undeveloped; the need to provide visitors with information about methods of transport, resources, and activities; the need for facilities such as more restrooms and amenities such as fresh water and food items.

Staff members from the national seashore, NPS Southeast Regional Office and Denver Service Center conducted a workshop in September 2006 to develop alternatives. These draft alternatives were presented to the public

in a newsletter that was distributed in February 2007 and at two public meetings in March 2007. Thirty-nine people attended the meetings and 21 respondents mailed comments on the newsletter. The sentiments expressed were similar to those given during the initial project scoping phase.

A "Choosing by Advantages" workshop was held April 23-24, 2007 to help select the preferred alternative. Public comments received on the draft alternatives provided guidance in making the selection.

Consultation has been done with the U.S. Fish and Wildlife Service (July 2007). The North Carolina Department of Environment and Natural Resources, Division of Coastal Management, will be consulted regarding consistency with the state's coastal management program concurrent with review of this document.

The Park Service notified the North Carolina Division of Archives and History, State Historic Preservation Office, about the current project and the intent to evaluate impacts on cultural resources in accordance with the requirements of the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. The Park Service will provide the State Historic Preservation Office with a copy of this document for compliance review.

A draft of this document is on the NPS Planning, Environment, and Public Comment (PEPC) Web site for public review.

**LIST OF AGENCIES AND ORGANIZATIONS RECEIVING A COPY OF THIS  
DOCUMENT**

North Carolina State Division of Coastal  
Management  
Stephen Rynas, Federal Consistency  
Coordinator  
400 Commerce Ave.  
Morehead City, NC 28557  
888-472-6278

U.S. Fish and Wildlife Service  
Raleigh Field Office,  
Pete Benjamin, Field Supervisor  
P.O. Box 33726  
Raleigh, NC 27636-3726

State Historic Preservation Officer  
Renee Gledhill-Earley  
4617 Mail Service Court  
Raleigh, North Carolina 27699-4617



**APPENDIXES  
AND  
REFERENCES**





## APPENDIX A: CONTRIBUTING HISTORIC BUILDINGS

### Cape Lookout Village Historic District

The following historic properties are identified as contributing resources in the national register nomination for the Cape Lookout Village Historic District.

*Seifert-Davis House (Coca-Cola House)* (ca. 1928) — This building is a one-story frame house with a low pyramidal hipped roof and shed porch along the front and west sides.

*Jetty Worker's Houses No. 1 and 2* (ca. 1915) — These are one-story frame, side-gable houses built on pilings with front and rear engaged porches.

*Baker-Holderness House (Casablanca)* (ca. 1930) — This building is a two-story frame, three-bay-wide house with a low-pitched roof and a large one-story west wing. As the largest private house on the cape, it occupies a prominent location on the southern shore of the inlet.

*Gordon Willis House* (ca. 1950) — This one-story frame, front-gable house was built in a “modest Craftsman style” with German exterior siding.

*Fishing Cottage No. 2* (ca. 1950) — This is a small, one-story, side-gable frame building with German exterior siding.

*Guthrie-Ogilvie House (Luther Guthrie House)* (ca. 1924) — This is a one-story, side-gable frame house with engaged front porch. A rear kitchen and bedroom are later additions.

*O'Boyle-Bryant House* (1939) — This is a one-story, side-gable frame house, set on pilings, with a front engaged porch.

*Gaskill-Guthrie House* (ca. 1915) — This is a one-story, side-gable frame house, set on pilings, with an engaged porch at the front and rear.

*Lewis-Davis House* (ca. 1920) — This is a one-story, side-gable frame house with engaged front porch. The front porch was extended and screened, and a small flat-roofed addition extends to the rear and south sides.

*Setzer-Dawsey House* (ca. 1920–40) — This one-story, side-gable house has board-and-batten siding and has been expanded and remodeled. Originally listed in the national register district nomination as a noncontributing building, an architectural reappraisal of the property (April 2007) revealed that much of the building's original form and historic fabric remains intact within the later additions. The house may date to the 1920s and be associated with Horace Nelson. An outbuilding, also recommended as a contributing property, may have been relocated from the lighthouse area.

**Relocated Government Buildings.** The following three structures were moved in the 1950s from their original locations near the lighthouse and the Coast Guard complexes. They were moved to the central portion of the village and adapted for private residential use.

*Lighthouse Keeper's Quarters* (1907) — This six-room, two-story house was built as a second Lighthouse Keeper's Quarters for the 1859 Cape Lookout light station. It was originally located immediately south of the brick 1873 Keepers' Quarters. The main block of the wood-frame house is three bays wide and one bay deep, with a side-gable roof. A central two-story ell with gable roof is at the rear.

*Life-Saving Station* (1887) — This two-story building originally stood beside the former Coast Guard Station. Most of the first floor originally served as the boat room for the

station. Rooms for the crew and storage were on the second floor. The building is a simplified but significant example of Stick style architecture (popular from the 1860s to about 1890), with Queen Anne-style architectural elements such as a gable roof, cross-gables, and hipped-roof dormers on the side elevations.

***Life-Saving Station Boat House*** (1924) — This three-bay-wide structure is a small one-story frame rectangular building with a hipped roof. Despite alterations, it retains most of its historic features, including the large boat-room doors that are concealed within the walls.

### **Portsmouth Village Historic District**

The following contributing buildings are identified in the 2007 draft “Portsmouth Village Cultural Landscape Report” (Wiss, Janney et al. 2007). The names of several of the buildings have been changed from those presented in the 1978 national register nomination. Many of the buildings have associated outbuildings.

**U.S. Life-Saving (Coast Guard) Station** (1894) — This is a two-story Shingle-style structure with screened porch, observation tower, and two sets of large doors for storing rescue boats. The shingle-clad structure rests on wood piers. The station was established in 1894 and served an important role in the community until it was decommissioned in 1937. The station retains a high degree of integrity and is one of the best preserved of 10 surviving similar structures. The Life-Saving Service constructed 21 stations during the 1890s along the eastern seaboard according to standardized designs.

**Summer Kitchen** (ca. 1908) — This wood-frame outbuilding with gable roof was constructed as a kitchen for the life-saving station. A dining room addition was attached to the building about 1942.

**Stable / Storage Building** (1928) — This wood-frame structure with vertical siding was initially constructed to stable horses for the life-saving station. It was later used for storage and as a garage.

**Roy Robinson House** (ca. 1926) — This house was built on the foundation of the marine hospital and was moved to its current site in 1935. The one-story hipped-roof structure rests on wood posts.

**Dennis Mason House** (ca. 1895) — This frame bungalow-style house with front dormer and covered porch with brick piers was extensively remodeled in the 1920s. It has two small one-story wings.

**Jesse Babb House** (ca. 1935) — This is a bungalow-style frame house with front dormer and covered porch. Outbuildings consist of a kitchen, garage, shed, and privy.

**McWilliams-Dixon House** (ca. 1910) — This is a one-story frame house with a wood shingle gable roof and covered front porch. The house was moved to its current site about 1937. A wood picket fence encloses the house. Outbuildings consist of a shed, cool house, and privy.

**Ed Styron House** (ca. 1933) — This is a simple one-story cottage supported on wood posts with a gable roof and board and batten siding.

**Methodist Church** (1915) — The wood-frame church exhibits Gothic Revival style elements (e.g., pointed arch windows and door opening) and a wood shingle gable roof. It replaced an earlier church structure that was destroyed by a hurricane in 1913. A central bell tower is positioned at the front.

**Washington Roberts House** (late 1840s) — The frame house with clapboard siding and shingle gable roof consists of a main 1½ story and a 1-story wing.

**George Dixon House** (ca. 1887) — The simple frame house with gable roof was severely damaged by Hurricane Isabel in 2003. The house is currently boarded up with plywood and stabilized with structural supports.

**Post Office and General Store** (ca. 1900) — This frame, gable-roof building is at the crossroads of the village. The structure is supported on wood posts and has clapboard and vertical board siding. The first post office at Portsmouth was established in 1840, and service continued until 1959.

**Henry Pigott House** (ca. 1900) — The frame house has a T-shaped floor plan, clapboard siding, and wood shingle roof, and is supported on wood posts. Outbuildings consist of a cool house, kitchen, two sheds, a privy, and a cistern.

**Tom Gilgo House** (mid-1920s) — This is a small T-shaped frame house with wood shingle roof and partial front porch. It was rehabilitated by the Park Service in the 1990s.

**Robert Wallace House** (ca. 1850) — This is a 1½-story frame house with two gabled dormers and a covered porch on the front. Clapboard siding covers the exterior, and it has a wood shingle roof.

**Carl Dixon House** (ca. 1930) — This is a front-gabled frame structure with a hipped-roof front porch. A summer kitchen building is next to the main house.

**Frank Gaskill House** (ca. 1930) — This frame house has a hipped-roof covered with wood shingles and clapboard exterior siding. The property includes a shed.

**Dixon-Salter House** (ca. 1900) — This is a large two-story structure with rear one-story wing. The hipped-roof is wood shingled, and exterior walls are clapboard. The covered front porch is supported by tapered wood columns. Outbuildings consist of a cool house, a shed, and a privy.

**Cecil Gilgo House** (ca. 1936) — This one-story frame house was constructed from salvaged materials. It has a gable wood shingle roof, vertical board siding, and an open platform front porch.

**Schoolhouse** (ca. 1910) — This structure has a hipped roof with wood shingles, clapboard siding, and a brick chimney. A shed is near the school building.

**Styron-Bragg House** (ca. 1928) — The 1½-story house was built as a sportsmen's lodge. It has a wood shingle hipped-roof, four dormers, and a covered porch with columns. A wood picket fence partially encloses the property. Outbuildings consist of a cool house and a shed.

**T.T. Potter House** (1952) — This large ranch-style house has composition board siding and an asphalt shingle roof.



APPENDIX B: FULL AND PART-TIME JOBS IN CARTERET COUNTY IN 2000

Table B-1: Full- and Part-Time Jobs, 2000

Township	Agriculture, Forestry, Fishing and Hunting, and Mining	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation and Warehousing, and Utilities	Information	Finance, Insurance, Real Estate, and Rental and Leasing	Professional, Scientific, and Management, Administrative and Waste Management Services	Educational, Health and Social Services	Arts, Entertainment, Recreation, Accommodation, and Food Services	Other Services (Except Public Administration)	Public Administration	Total
Atlantic	38	21	20	7	25	23	0	4	23	74	4	18	39	296
Beaufort	136	370	383	77	503	154	93	111	314	569	442	215	319	3,686
Cedar Island	65	24	22	0	0	34	4	0	0	24	0	0	7	180
Davis	8	7	10	0	21	0	0	22	39	63	13	8	0	191
Harkers Island	71	95	71	7	33	35	0	0	19	153	68	28	63	643
Harlow	51	97	59	13	89	44	12	9	6	69	38	20	91	598
Marshallberg	0	30	16	25	15	7	9	0	0	62	15	0	0	179
Merrimon	10	6	37	30	12	11	0	0	33	50	23	7	12	231
Morehead	168	1,252	721	267	1,469	344	225	835	890	2,165	1,168	557	938	10,999
Newport	58	480	301	95	513	170	51	126	195	547	450	285	630	3,901
Portsmouth Island	0	0	0	0	0	0	0	0	0	0	0	7	0	7
Sea Level	0	0	7	0	19	14	0	0	7	14	0	0	17	78
Smyrna	40	38	25	9	84	0	9	29	16	73	45	10	78	456
Stacy	0	11	0	0	18	23	0	8	0	35	0	10	18	123
Straits	102	55	125	38	106	90	18	53	41	151	113	29	190	1,111
White Oak	58	556	246	165	588	146	73	446	311	832	397	200	413	4,431
Carteret County	805	3,042	2,043	733	3,495	1,095	494	1,643	1,894	4,881	2,776	1,394	2,815	27,110
<b>% of Total Jobs</b>	<b>3.0%</b>	<b>11.2%</b>	<b>7.5%</b>	<b>2.7%</b>	<b>12.9%</b>	<b>4.0%</b>	<b>1.8%</b>	<b>6.1%</b>	<b>7.0%</b>	<b>18.0%</b>	<b>10.2%</b>	<b>5.1%</b>	<b>10.4%</b>	<b>100.0%</b>

Source: U.S. Census 2000



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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 historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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