

## Fundamental Resources and Values

1 Fundamental resources and values are  
2 systems, processes, features, visitor  
3 experiences, stories, scenes that warrant  
4 primary consideration during planning and  
5 management because they are critical to  
6 achieving the monument's purpose and  
7 maintaining its significance. It is these  
8 resources and values that maintain the park's  
9 purpose and significance, and if these  
10 resources are allowed to deteriorate, the park  
11 purpose and/or significance could be  
12 jeopardized. The following list is presented in  
13 no particular order of importance.

14 The military significance of the battle

- The naval blockade and the series of fortifications and batteries, like Battery Hamilton, led to the closure of the Port of Savannah and the cutoff of Fort Pulaski from resupply.
- The Union army's capture of the fort and its subsequent use of the fort to keep the Port of Savannah closed.
- The geography and other land and water features of the area facilitated the Union strategy.

The history of the development and evolution of coastal defenses in the United States

- The fort structure is characterized by its well-preserved condition and unique construction (primarily its shape and placement on the site).
- The fort is in an excellent state of preservation, virtually unaltered from its original design.
- The national monument is the site of Fort George, a colonial defensive structure begun in late 1761.
- The national monument is the site of Fort Greene, a First System fort begun in 1794.
- The 1869-1872 modernizations to Fort Pulaski (remodeling of the

demilune, installation of underground magazines and passageways and constructing gun emplacements) demonstrate the evolution of military strategy and technology.

- The national monument is the site of Battery Hambright, a Spanish American War era structure.



### HISTORIC MAP (HENRY MEHLES) OF FEDERAL BATTERIES

## The story of military weaponry and tactics

- The fort structure itself, particularly the southeast angle, shows the damage clearly.
- Original rifled cannons, believed to have been used by federal troops on Tybee Island during the siege and reduction of the fort, now silent, serve as potent interpretive tools for both historian and monument visitor alike.
- The story includes the hasty surrender (April 11, 1862) by Colonel Olmstead within 30 hours of the commencement of hostilities, as well as the groundbreaking application of military technology, the use of rifled cannons against masonry fortifications.
- The geography, landscape, and landforms of the area favored the Union attack strategy and tactics. (Lack of trees on Cockspur provided clear view for the Union side while trees on Tybee Island provided concealment for the Union batteries).

- Robert E. Lee visited Fort Pulaski in 1861 and assessed the defensive position of the fort as adequate to withstand attack by cannon from Tybee Island.

#### African American connections to the site

- Fort Pulaski's history includes the story of one of the earliest efforts to free enslaved African Americans months before Lincoln's emancipation proclamation. General David Hunter's efforts influenced Lincoln and were designed to help former slaves achieve full citizenship through military service, education, and the practice of subsistence farming rather than cash crops such as cotton.



**FREED MEN AND WOMEN AT FORT PULASKI**

#### Stories about the mistreatment of prisoners of war

- The national monument is the burial location for the 13 people who died during winter 1864–1865.
- Records and accounts of the events help illuminate those events for modern visitors.
- Archeological evidence of the cemetery contributes to interpretive programming.
- The fort was used as a prison.

#### Robert E. Lee's connections and contributions to the site

- Lee designed the dike system and the associated drainage ditches and canals.
- The young Lieutenant supervised construction of the village used by workers, the principal wharf, and cisterns, some of which survive today.
- Lee prepared surveys that determined the fort's location.
- Lee's connections include stories about his experience in surviving the intense physical environment.
- Lee endured emotional stress due to isolation from local communities.
- There are many stories of Lee's interactions with the community of Savannah.

#### The vast virtually undisturbed salt marsh which stands in stark contrast to the heavily modified environment of Cockspur Island

- The size of the marsh and the fact that it exists as a contiguous habitat (ecological value of the size and scope of the area).
- Water quality is high enough to support recreational oyster harvesting.
- It is a nursery for many juveniles of fish and shellfish species.
- It provides habitat for many threatened and endangered species and species of concern (e.g., diamondback terrapin, manatee, wood stork).
- The calming and rejuvenating experience provided by views of the vast expanse of uninterrupted marsh.
- The marsh offers superb opportunities for eco-tourism (e.g., canoeing, kayaking).
- There is an opportunity to compare an altered environment with one

essentially unaltered (Cockspur vs. McQueens islands).

### Other Important Resources and Values

Parks may also have other important resources and values that may not be fundamental to the park's purpose and significance but are nevertheless determined to be particularly important considerations for general management planning. Identifying other important resources and values is primarily done to separate those resources or values that are covered by the servicewide mandates and policies, from those that have important considerations to be addressed in the general management plan.

### Cultural Resources

- Wesley Monument — John Wesley, founder of Methodism, landed on Cockspur Island in 1736. Wesley's journal records:  
 "...about eight in the morning I first set foot on American ground. It was a small uninhabited island...over against Tybee, called by the English Peeper Island. Mr. Oglethorpe led us through the moorish land on the shore to a rising ground...we chose an open place surrounded with myrtles, bays, and cedars, which sheltered us from the sun and wind, and called our little flock together to prayers."

The previous quotation is inscribed on the Wesley Monument within Fort Pulaski National Monument. The monument is a simple brick column set on a limestone base.

- Battery Hambright — Between 1898 and 1899, to provide additional harbor protection during the Spanish-American War, the War Department built Battery Horace Hambright on Cockspur Island's

north shore. (Meader and Binkley, 2003)

- Quarantine Station — On May 8, 1889, the War Department issued a revocable license to the city of Savannah to establish a quarantine station on the northwest portion of Cockspur Island. A Caribbean-style raised cottage, still extant and used as the monument administrative headquarters today, was completed in 1891 for a quarantine officer. (Meader and Binkley, 2003)



QUARANTINE STATION AND HOSPITAL

- Cockspur Island Lighthouse — Situated on an islet off the southeastern tip of Cockspur Island marking the South Channel Savannah River, the Cockspur Island Lighthouse stands 12 miles east of the Port of Savannah. The islet, often covered by high tide, is comprised of oyster shells, and marsh grass. Documented references suggest the first brick tower, used as a daymark, was built on Cockspur Island between March, 1837, and November, 1839. In 1854, the structure was destroyed by a hurricane. The tower was rebuilt and enlarged on the same foundation the next year.



COCKSPUR LIGHTHOUSE FROM GROUND LEVEL

- Cisterns, brick foundation ruins, north pier — These elements are the remains of the construction village used by workers who built Fort Pulaski. The village consisted of small frame buildings, many built on stilts. Some of the structures served as dormitories for workers, while others were reserved for managers. A hospital and storage areas were also constructed. The remains of a stone pier on the north shore of Cockspur Island can be seen at the end of a trail that begins just northwest of the fort's parking lot.

## Recreation Opportunities

- Wildlife viewing opportunities (deer, herons, eagles, alligators, etc.)
- Outdoor recreation opportunities (walking, bicycling, etc.)
- Fishing opportunities

## Primary Interpretive Themes

Interpretive themes are ideas, concepts, or stories that are central to the monument's

purpose, significance, identity, and visitor experience. The primary interpretive themes define concepts that every visitor should have the opportunity to learn. Primary themes also provide the framework for the park's interpretation and educational programs, influence the visitor experience, and provide direction for planners and designers of the park's exhibits, publications, and audiovisual programs. Subsequent interpretive planning may elaborate on these primary themes.

In 1999, Representative Jesse Jackson, Jr. (D-IL) inserted language in the Fiscal Year 2000 National Park Service appropriations bill that included this statement: "The Secretary of the Interior is directed to *encourage* (emphasis added) the National Park Service managers of Civil War battle sites to recognize and include in all of their public displays and multimedia educational presentations, the unique role that the institution of slavery played in causing the Civil War and its role, if any, at the individual battle sites."

In general management planning, primary interpretive themes may form the basis for alternatives and management zones that prescribe resource conditions and visitor experiences. Identifying primary themes leads to recommendations for interpretive and educational facilities, media, and services that are core to park missions and facilitate emotional and intellectual connections with park resources and values. The development and interpretation of primary themes provide a framework for shared perspectives among visitors, stakeholders, and the public.

The more significant themes at Fort Pulaski National Monument, extracted from the monument's August 2006 long-range interpretive plan are as follows:

- Fort Pulaski was strategically significant during the Civil War to both Confederate and Union political and military interests. (Shaping the Political Landscape — Political Theories)
- The rifle artillery siege of Fort Pulaski was a landmark experiment in the



- 1 history of military science and  
2 invention. (Expanding Science and  
3 Technology — Experiment and  
4 Invention)
- 5 • For over 250 years, Cockspur Island  
6 served the colonial, state, and  
7 national governments as a strategic  
8 site for protecting economic and  
9 political interests. (Developing the  
10 American Economy — Government  
11 Policies and Practices, Shaping the  
12 Political Landscape)
- 13 • In October 1864, Union troops  
14 stationed at Fort Pulaski accepted  
15 transfer of a group of imprisoned  
16 Confederate officers who later  
17 became known as the Immortal Six  
18 Hundred. The treatment of prisoners  
19 of war and political prisoners  
20 continues to be a relevant topic in the  
21 21st century. (Shaping the Political  
22 Landscape — Military Institutions)
- 23 • A labor force of skilled workers, both  
24 free and slave, under the supervision  
25 of the U.S. Army Corps of Engineers  
26 built the fort. (Developing the  
27 American Economy — Workers and  
28 Work Environments)
- 29 • The construction village which used  
30 the northern bank of the Savannah  
31 River provided living  
32 accommodations for the skilled  
33 workers. A large pier was constructed  
34 to handle the arrival of supplies from  
35 ports north and south. (Developing  
36 the American Economy — Workers  
37 and Work Environments)
- 38 • The design and construction of Fort  
39 Pulaski was a significant project for  
40 the U. S. Army Corps of Engineers.  
41 (Shaping the Political Landscape —  
42 Military Institutions)
- 43 • King Cotton brought wealth to the  
44 South and the port city of Savannah.  
45 (Developing the American Economy  
46 — Exchange and Trade)
- 47 • The artificial environments on  
48 Cockspur Island contrast significantly  
49 with the natural environments on  
50 adjacent McQueens Island.

(Transforming the Environment —  
Adverse Consequences)

- 51 • The Savannah Bar Pilots and their  
52 forbears have served the Port of  
53 Savannah from Cockspur and  
54 McQueens islands almost  
55 continuously since 1762. (Developing  
56 the American Economy — Exchange  
57 and Trade)
- 58 • Fort Pulaski and its remnant  
59 structures on Cockspur Island and  
60 the vast salt marshes of McQueens  
61 Island are worthy of protection as a  
62 unit of the National Park Service.  
63 (Transforming the Environment —  
64 Protecting and Preserving)



**NORTH TIDAL GATE**

- 67 • Much of Fort Pulaski National  
68 Monument's initial restoration and  
69 site operations were carried out by  
70 the Civilian Conservation Corps  
71 (CCC) as part of the federal  
72 government's effort to stimulate  
73 recovery from the Great Depression.  
74 (Developing the American Economy  
75 — Government Policies and  
76 Practices/Workers and Work  
77 Environments)
- 78 • Cockspur and McQueens islands  
79 were laboratories for technical and  
80 scientific developments in mosquito  
81 control, particularly during the  
82 period 1935-80. (Expanding Science  
83 and Technology — Effects on  
84 Lifestyle and Health/Transforming  
85 the Environment — Manipulating the  
86 Environment and Its Resources)

## SERVICEWIDE LAWS AND POLICIES

This section (expanded in appendix A) identifies what must be done at Fort Pulaski National Monument to comply with federal laws and policies of the National Park Service. Many park management directives are specified in laws and policies guiding the National Park Service and are therefore not subject to alternative approaches. For example, there are laws and policies about managing environmental quality (such as the Clean Air Act, the Endangered Species Act, and Executive Order 11990 “Protection of Wetlands”); governing the preservation of cultural resources (such as the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act); and providing public services (such as the Americans with Disabilities Act) — to name only a few. In other words, a general management plan is not needed to decide, for instance, that it is appropriate to protect endangered species, control exotic species, protect archeological sites, conserve artifacts, or provide for handicap access. Laws and policies have already decided those. Although attaining some of these conditions set forth in these laws and policies may have been temporarily deferred in the park because of funding or staffing limitations, the National Park Service will continue to strive to implement these requirements with or without a new general management plan.

Some of these laws and executive orders are applicable solely or primarily to units of the national park system. These include the 1916 Organic Act that created the National Park Service, the General Authorities Act of 1970, the act of March 27, 1978, relating to the management of the national park system, and the National Parks Omnibus Management Act (1998). Other laws and executive orders have much broader application, such as the Endangered Species Act, the National Historic Preservation Act, and Executive Order 11990 that address the protection of wetlands (see appendix A).

The NPS Organic Act (16 USC § 1) provides the fundamental management direction for all units of the national park system:

[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations...by such means and measure as conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The National Park System General Authorities Act (16 USC § 1a-1 et seq.) affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, amendments state that NPS management of park units should not “derogat[e]...the purposes and values for which these various areas have been established.”

The National Park Service also has established policies for all units under its stewardship. These are identified and explained in a guidance manual entitled *NPS Management Policies 2006*. The “action” alternatives (alternatives B and C) considered in this document incorporate and comply with the provisions of these mandates and policies.

Public Law 95-625, the National Park and Recreation Act, requires the preparation and timely revision of general management plans for each unit of the national park system. Section 604 of that act outlines several requirements for general management plans, including measures for the protection of the area’s resources and “indications of potential modifications to the external boundaries of

the unit and the reasons therefore.” NPS  
*Management Policies* adopted in 2006  
 reaffirm this legislative directive.

To truly understand the implications of an  
 alternative, it is important to combine the  
 servicewide mandates and policies with the  
 management actions described in an  
 alternative.

Table 1 shows some of the most pertinent  
 servicewide mandates and policy topics

related to planning and managing Fort  
 Pulaski National Monument; each topic has  
 desired conditions that NPS staff is striving to  
 achieve. Appendix A expands on this  
 information by citing the law or policy  
 directing these actions and giving examples  
 of the types of actions being pursued. The  
 alternatives in this general management plan  
 address the desired future conditions that are  
 not mandated by law and policy and must be  
 determined through a planning process.

**TABLE 1. SERVICEWIDE MANDATES AND POLICIES PERTAINING TO FORT PULASKI NATIONAL MONUMENT**

Topic	Current laws and policies require that the following conditions be achieved at Fort Pulaski National Monument
Relations with Private and Public Organizations, Owners of Adjacent Land, and Governmental Agencies	<p>Fort Pulaski National Monument is managed as part of a greater ecological, social, economic, and cultural system.</p> <p>Good relations are maintained with adjacent landowners, surrounding communities, and private and public groups that affect, and are affected by, the park. The monument is managed proactively to resolve external issues and concerns and ensure that monument values are not compromised.</p> <p>Because the national monument is an integral part of a larger regional environment, the National Park Service works cooperatively with others to anticipate, avoid, and resolve potential conflicts, protect national monument resources, and address mutual interests in the quality of life for community residents. Regional cooperation involves federal, state, and local agencies, neighboring landowners, and all other concerned parties.</p>
<b>Natural Resources</b>	
Air Quality	Air quality in the monument meets national ambient air quality standards for specified pollutants. The monument's air quality is maintained or enhanced with no significant deterioration.
Ecosystem Management	The monument is managed holistically, as part of a greater ecological, social, economic, and cultural system.
Exotic Species	The management of populations of exotic plant and animal species, up to and including eradication, are undertaken wherever such species threaten monument resources or public health and when control is prudent and feasible.
Fire Management	<p>Fort Pulaski National Monument fire management programs are designed to meet resource management objectives prescribed for the various areas of the monument and to ensure that the safety of firefighters and the public are not compromised.</p> <p>All wildland fires are effectively managed, considering resource values to be protected and firefighter and public safety, using the full range of strategic and tactical operations as described in an approved fire management plan.</p>
Floodplains	<p>Natural floodplain values are preserved or restored.</p> <p>Long-term and short-term environmental effects associated with the occupancy and modification of floodplains are avoided.</p> <p>When it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain or where the floodplain will be affected, the National Park Service</p> <p>Prepares and approves a statement of findings in accordance with DO 77-2.</p> <p>Uses nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing impacts on the natural resources of floodplains.</p> <p>Ensures that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR 60).</p>

Topic	Current laws and policies require that the following conditions be achieved at Fort Pulaski National Monument
General Natural Resources/ Restoration	Native species populations that have been severely reduced in or extirpated from Fort Pulaski National Monument are restored where feasible and sustainable. Populations of native plant and animal species function in as natural condition as possible except where special considerations are warranted.
Geologic Resources	NPS will preserve and protect geologic resources as integral components of monument natural systems. As used here, the term “geologic resources” includes both geologic features and geologic processes.
Land Protection	Land protection plans are prepared to determine and publicly document what lands or interests in land need to be in public ownership, and what means of protection are available to achieve the purposes for which the national park system unit was created.
Native Vegetation and Animals	The National Park Service will maintain as parts of the natural ecosystem, all native plants and animals in the park.
Soils	The National Park Service actively seeks to understand and preserve the soil resources of Fort Pulaski National Monument, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources. Natural soil resources and processes function in as natural a condition as possible, except where special considerations are allowable under policy.
Threatened and Endangered Species and Species of Concern	Federal and state-listed threatened and endangered species and their habitats are protected and sustained. Native threatened and endangered species populations that have been severely reduced in or extirpated from Fort Pulaski National Monument are restored where feasible and sustainable.
Water Resources	Surface water and groundwater are protected, and water quality meets or exceeds all applicable water quality standards. NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater.
Wetlands	The natural and beneficial values of wetlands are preserved and enhanced. The National Park Service implements a “no net loss of wetlands” policy and strives to achieve a longer-term goal of net gain of wetlands across the national park system through the restoration of previously degraded wetlands. The National Park Service avoids to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and avoids direct or indirect support of new construction in wetlands wherever there is a practicable alternative. The National Park Service compensates for remaining unavoidable adverse impacts on wetlands by restoring wetlands that have been previously degraded.
<b>Cultural Resources</b>	
Archeological Resources	Archeological sites are identified and inventoried and their National Register of Historic Places (National Register) significance is determined and documented. Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable. When disturbance or deterioration is unavoidable, the site is professionally documented and excavated and the resulting artifacts, materials, and records are curated and conserved in consultation with the Historic Preservation Division of the Georgia Department of Natural Resources, Advisory Council on Historic Preservation, American Indian tribes, and others as appropriate. Mitigation may include a variety of measures ranging from avoidance to data recovery, and is generally included in a memorandum of agreement. Artifacts, materials, and records resulting from data recovery are curated and conserved as provided for in 36 CFR 79. Some archeological sites that can be adequately protected may be interpreted to the visitor.
Historic Structures	Historic structures are inventoried and their significance and integrity are evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing of historic structures on the national



PURPOSE AND NEED FOR THE PLAN

Topic	Current laws and policies require that the following conditions be achieved at Fort Pulaski National Monument
	register are protected in accordance with the <i>Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i> . However, if it is determined through a formal process that disturbance or natural deterioration is unavoidable, mitigation measures and consultation are initiated as described for archeological resources, previously.
Ethnographic Resources	Appropriate cultural anthropological research is conducted in cooperation with groups associated with Fort Pulaski National Monument. All ethnographic resources determined eligible for listing or listed on the national register are protected. If disturbance of such resources is unavoidable, formal consultation with the state historic preservation division, the Advisory Council on Historic Preservation, and with American Indian tribes as appropriate, is conducted.
Cultural Landscapes	Cultural landscape inventories are conducted to identify landscapes potentially eligible for listing in the national register, and to assist in future management decisions for landscapes and associated resources, both cultural and natural. The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, and uses when those uses contribute to its historical significance. Treatments are based on sound preservation practices for the preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i> . The National Park Service is preparing a cultural landscape report for Fort Pulaski National Monument. The cultural landscape report will be submitted for monument approval prior to final approval of the general management plan.
Museum Collections	All museum collections (prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens) are identified and inventoried, catalogued, documented, preserved, and protected, and provision is made for access to and use of items in the collections for exhibits, research, and interpretation in consultation with traditionally associated groups. The qualities that contribute to the significance of collections are protected in accordance with established standards.
Visitor Use and Experience	
Visitor Use and Experience and Park Use Requirements	Fort Pulaski National Monument resources are conserved "unimpaired" for the enjoyment of future generations. Visitors have opportunities for types of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in the park. No activities occur that would cause derogation of the values and purposes for which the monument was established. For all zones, districts, or other logical management divisions within Fort Pulaski National Monument, the types and levels of visitor use are consistent with the desired resource and visitor experience conditions prescribed for those areas consistent with the unit's purpose. Park visitors will have opportunities to understand and appreciate the significance of the monument and its resources, and to develop a personal stewardship ethic by directly relating to the resources. To the extent feasible, programs, services, and facilities in the monument are accessible to and usable by all people, including those with disabilities within an inviting atmosphere accessible to every segment of American society.
Public Health and Safety	Although recognizing that there are limitations on its capability and constraints imposed by the Organic Act to not impair resources, the service and its concessioners, contractors and cooperators will seek to provide a safe and healthful environment for visitors and employees. The monument staff will strive to identify recognizable threats to safety and health and protect property by applying nationally accepted standards. Consistent with mandates and nonimpairment, the monument staff will reduce or remove known hazards and/or apply appropriate mitigative measures, such as closures, guarding, gating, education, and other actions.

Topic	Current laws and policies require that the following conditions be achieved at Fort Pulaski National Monument
Other Topics	
Sustainable Design/ Development	<p>NPS facilities are harmonious with monument resources, compatible with natural processes, aesthetically pleasing, functional, as accessible as possible to all segments of the population, energy-efficient, and cost effective.</p> <p>All decisions regarding monument operations, facilities management, and development in the monument — from the initial concept through design and construction — reflect principles of resource conservation. Thus, all monument developments and monument operations are sustainable to the maximum degree possible and practical. New developments and existing facilities are located, built, and modified according to the <i>Guiding Principles of Sustainable Design</i> (NPS 1993) or other similar guidelines.</p> <p>Management decision-making and activities throughout the national park system should use value analysis, which is mandatory for all Department of the Interior bureaus, to help achieve this goal. Value planning, which may be used interchangeably with value analysis/value engineering/value management, is most often used when value methods are applied on general management or similar planning activities.</p>
Wilderness Values	<p>The National Park Service preserves the wilderness character of those areas eligible for wilderness designation until such time as Congress makes the decision to include or exclude lands in the monument from the National Wilderness Preservation System.</p>
Transportation to and within the Park	<p>Visitors have reasonable access to the park, and there are connections from the monument to regional transportation systems as appropriate. Transportation facilities in the monument provide access for the protection, use, and enjoyment of monument resources. They preserve the integrity of the surroundings, respect ecological processes, protect monument resources, and provide the highest visual quality and a rewarding visitor experience.</p> <p>The National Park Service participates in all transportation planning forums (U.S. Highway 80 &amp; Savannah Port Project) that may result in links to parks or impact monument resources. Working with federal, tribal, state, and local agencies on transportation issues, the National Park Service seeks reasonable access to parks, and connections to external and alternative transportation systems.</p>
Utilities and Communication Facilities	<p>Neither Fort Pulaski National Monument resources nor public enjoyment of the monument are denigrated by nonconforming uses. Telecommunication structures are permitted in the monument to the extent that they do not jeopardize the monument's mission and resources. No new nonconforming use or rights-of-way are permitted through the monument without specific statutory authority and approval by the director of the National Park Service or his representative, and are permitted only if there is no practicable alternative to such use of NPS lands.</p>

## OTHER PLANNING EFFORTS RELATED TO THIS GENERAL MANAGEMENT PLAN

Fort Pulaski National Monument is located on Cockspur and McQueens islands, Georgia, between Savannah and Tybee Island on the Atlantic Ocean coast. The monument is surrounded mostly by waters including the North and South Channels Savannah River, the Bull River, the Atlantic Ocean, and Lazaretto Creek. The Georgia Department of Transportation owns Long Island and Bird Island, which lie immediately to the west of the Cockspur Island portion of the national monument and consist of land mostly created by dredge spoil from the Savannah River. There are no private landowners immediately adjoining the park, however there is a parcel on Tybee Island that is within the authorized boundary but is within private ownership. The owners of this parcel worked with Fort Pulaski to create a small park and exhibit to provide visitors with the only on-the-ground opportunity for visualizing the perspective and line of sight of the federal batteries on Tybee Island.

Several plans have influenced or would be influenced by the approved general management plan for Fort Pulaski National Monument. These include plans by the Georgia Department of Transportation to widen and elevate U.S. Highway 80 which runs through the middle of the national monument and is the only road link between Tybee Island and the mainland at Savannah. A major planning effort by the Georgia Port Authority in conjunction with the U.S. Army Corps of Engineers aims to deepen the North Channel Savannah River to accommodate larger and faster container ships in order to maintain competitiveness for the Port of Savannah. Both of these projects have potentially serious impacts on natural and cultural resources within the national monument.

A cultural landscape report for Fort Pulaski is in process as this general management plan is being written. That document will tier off the final general management plan for its

principal recommendations. The following sections highlight those plans most relevant to this general management plan.

### The Georgia Department of Transportation's U.S. Highway 80 Expansion Project

This project consists of the widening and elevation of U.S. Highway 80 between Savannah and Tybee Island to the east. The Georgia Department of Transportation has notified the monument that some land within the monument boundary will be required for the expanded right-of-way as well as for temporary storage of materials and for staging purposes.

An opinion issued by the Department of the Interior's Regional Solicitor in Atlanta dated October 13, 2006, concluded that an Act of Congress would be required to enable a land exchange between Fort Pulaski National Monument and the Georgia Department of Transportation unless the Secretary of the Department of the Interior, under Section 4(f) of the Department of Transportation Act of 1966, determines that impacts from the project on the national monument will be *de minimis*.

The monument has begun negotiations with the Georgia Department of Transportation to provide for mitigation of lands that would be lost to the project and for other impacts. The highway bisects Fort Pulaski National Monument and therefore this project has the potential to adversely impact natural and cultural resources on the McQueens Island side of the park. The National Park Service has participated in the planning process and will continue to do so as this project moves forward.

### The Georgia Port Authority's Savannah Harbor Expansion Project

The U.S. Army Corps of Engineers is the lead federal agency for an evaluation of the deepening of the Federal Navigation Project

at Savannah Harbor, Georgia, in increments from the existing depth of 42 feet Mean Low Water to a potential depth of 48 feet, to ease current shipping constraints and to accommodate anticipated growth in commerce and vessel sizes. In the Water Resources Development Act of 1999, the U.S. Congress authorized deepening the navigation channel to a maximum depth of 48 feet Mean Low Water, subject to further studies and approval of those study results by four federal agencies. The other three federal agencies—the U.S. Environmental Protection Agency (U.S. EPA) (Region IV), the Department of Commerce (acting through the National Marine Fisheries Service), and the Department of the Interior (acting through the U.S. Fish and Wildlife Service)—have agreed to participate as cooperating agencies in the preparation of the Tier II EIS. The Georgia Ports Authority will also serve as a cooperator in the environmental impact statement development process.

Wave action from larger, faster container ships entering and leaving the Port of Savannah has the potential to cause serious erosion to the northern shoreline of Cockspur Island and the foundation of the Cockspur Island Lighthouse just off the eastern shore of Cockspur Island.

### **The National Park Service Cultural Landscape Report**

The National Park Service is preparing a cultural landscape report for Fort Pulaski National Monument. The report will be submitted for monument approval prior to final approval of the general management plan. The plan sets broad goals for future resource conditions and visitor experiences. A cultural landscape report establishes more specific preservation goals for a cultural landscape. The goals must be grounded in research, inventory, documentation, and analysis and evaluation of a landscape's characteristics and associated features. The content of a cultural landscape report provides the basis for making sound

decisions about management, treatment, and use. A report may include information spanning numerous disciplines in order to evaluate a landscape's historical, architectural, archeological, ethnographic, horticultural, landscape architectural, and engineering features, along with ecological processes and natural systems. Based on this information and site management goals, such as access, contemporary use, and interpretation, a cultural landscape report outlines appropriate treatment for a landscape consistent with its significance, condition, and planned use.

### **The Georgia State Historic Preservation Plan 2007-2011 (Building a Preservation Ethic)**

The preparation and implementation of a statewide comprehensive plan for historic preservation is required by the National Park Service for the participation of a state historic preservation office in the national historic preservation program. In Georgia, the Historic Preservation Division, a unit of the Department of Natural Resources, administers the program. This document is the guiding document for the state's historic preservation program. The primary goal in the Georgia historic preservation plan is naturally to "Preserve Georgia's Historic Resources." The National Park Service assists and partners with the Historic Preservation Division in many ways to achieve this goal. An important example is the Certified Local Governments Program. Seventy-five Georgia communities (including Savannah and Chatham County) participate in the program, choosing to enter into a preservation partnership with the Historic Preservation Division and the National Park Service. By passing a preservation ordinance and establishing a local commission that complies with the Georgia Historic Preservation Act, these communities commit to actively protect their historic resources. This partnership establishes a relationship among these local governments and the state and federal agencies carrying out historic preservation programs. Certified local government

1 programs benefit from this status by receiving  
2 technical assistance and being eligible for  
3 grant funds passed through the Historic  
4 Preservation Division from the National Park  
5 Service.

## **The Regional Plan of Coastal Georgia 2010**

6 “The *Regional Plan of Coastal Georgia* has  
7 been created to provide guidance to regional  
8 and business leaders, local government, state  
9 and federal agencies, and citizens as they help  
10 shape coastal Georgia’s future. It is the result  
11 of a comprehensive review and analysis of  
12 coastal Georgia’s 10 counties and 35  
13 municipalities’ land development trends and  
14 patterns that identified opportunities and  
15 challenges facing the region.” Under the  
16 heading “Intrinsic Resources: Cultural and  
17 Historical” the Coastal Regional Commission  
18 expresses a vision of protecting, restoring,  
19 enhancing, and managing these resources for  
20 the benefit of its citizens, visitors, and future  
21 generations. This is very similar vision to that  
22 expressed in the language found in the  
23 National Park Service Organic Act of 1916:  
24 “...to conserve the scenery and the natural  
25 and historic objects and the wildlife therein  
26 and to provide for the enjoyment of the same  
27 in such manner and by such means as will  
28 leave them unimpaired for the enjoyment of  
29 future generations.” More specifically, a  
30 guiding principle in this section of the plan is  
31 to “Maintain viewsheds of significant cultural  
32 and historic assets.” Performance standards  
33 for achieving this principle include adopting  
34 design guidelines that protect viewsheds of  
35 significant cultural and historic assets and  
36 restricting incompatible features from  
37 encroaching upon important cultural,  
38 archeological, and historical viewsheds.  
39 These principles and performance standards  
40 are perfectly in tune with a major emphasis of  
41 the Fort Pulaski National Monument general  
42 management plan which is to re-establish and  
43 preserve the views between the southeast  
44 angle of the fort and the positions of the  
45 Federal batteries that reduced that face of the  
46 structure to rubble in April 1862.

## **Coastal Georgia Comprehensive Economic Development Strategy 2007**

47 “The Coastal Georgia Comprehensive  
48 Economic Development Strategy is designed  
49 to bring together the public and private  
50 sectors in the creation of an economic  
51 roadmap to diversity and strengthen the  
52 regional economy. By completing this  
53 strategy, the region is eligible for economic  
54 development assistance investment from the  
55 U.S. Department of Commerce, Economic  
56 Development Administration. The region  
57 served by the Coastal Georgia Regional  
58 Development Center is also an Economic  
59 Development District designated by the  
60 Economic Development Administration.  
61 Economic development assistance  
62 investments from the Economic  
63 Development Administration can help fund  
64 local infrastructure projects, technology-led  
65 economic development projects, and  
66 strategies to respond to sudden and severe  
67 economic dislocations (e.g., major lay-offs,  
68 plant closures).”

69 Among the major strategies of this plan are  
70 the balancing of recreational uses of coastal  
71 resources with environmental protection,  
72 and the enhancement of natural, historic, and  
73 cultural core areas for recreation, public  
74 education, and tourist attractions to the  
75 extent such enhancements are appropriate  
76 within the protection mission. The mission  
77 and purpose of Fort Pulaski National  
78 Monument Plan and the general management  
79 plan alternatives in this document are entirely  
80 consistent with these strategies.

## **Gullah-Geechee Cultural Heritage Corridor Management Plan**

81 Designated by Congress in 2006, the  
82 Gullah/Geechee Cultural Heritage Corridor  
83 extends from Wilmington, North Carolina, in  
84 the north to Jacksonville, Florida, in the  
85 south. It is home to one of America's most  
86 unique cultures, a tradition first shaped by  
87 captive Africans brought to the southern  
88 United States from West Africa and



continued in later generations by their descendents. The Gullah/Geechee Cultural Heritage Corridor Commission in early 2009 embarked on a series of 21 public meetings for the development of a management plan. In June of 2009, at a public input meeting in Savannah, Georgia, Tammy Herrell, Administrative Officer of Fort Pulaski National Monument, addressed the meeting by noting Fort Pulaski's involvement with the Gullah-Geechee Corridor since the year 2000 and by expressing the determination of the monument superintendent and staff to continue educational and interpretive programs that blend the Gullah/Geechee history and culture with the other stories that are part of the Fort Pulaski program.

## PLANNING ISSUES/CONCERNS

During scoping (early information gathering) for this general management plan, National Park Service staff, the general public, university scientists and historians, local, state, and county government representatives, and other federal agency staff identified various issues and concerns. An issue is defined as an opportunity, conflict, or problem regarding the use or management of public lands. Comments were solicited at public meetings, through planning newsletters, and on the Fort Pulaski National Monument's website (see the "Consultation and Coordination" chapter).

Comments received during scoping revealed concerns about access to the Cockspur Island Lighthouse, interpretation of African American history associated with the site, potential expansion of the monument boundary to include sites of federal batteries on Tybee Island, potential adverse impacts on the national monument's natural and cultural resources from the proposed widening of U.S. Highway 80 and the deepening of the North Channel Savannah River, and extension of the McQueens Island hiker/biker path to Lazaretto Creek and ultimately across the creek to Tybee Island. The issues and concerns generally involve

protecting monument resources from shoreline erosion, oil and other hazardous material spills in the Savannah River, and excessive use. The general management plan alternatives provide strategies for addressing the issues within the context of the Fort Pulaski's purpose, significance, and special mandates.

## DECISION POINTS AND CONSIDERATIONS

Many aspects of the desired future conditions of Fort Pulaski National Monument are defined in the establishing Presidential Proclamation, the monument's purpose and significance statements, and established laws and policies. The resolution of questions or issues that have not already been addressed by legislation or laws and policies are the basis for developing different alternatives or approaches to managing the park into the future, because usually there is more than one way an issue could be resolved. As with any decision-making process, there are key decisions that, once made, will dictate the direction of subsequent management strategies. Based on public and partner comments and NPS concerns, the following major decision points were identified for Fort Pulaski National Monument:

- Should the cultural landscape of Cockspur Island be restored to look more like it did in 1862, which would involve removal of some trees and relocating the visitor parking lot to an area not visible from the terreplein (gun deck) of the fort?
- What provisions should be made for recreational opportunities outside the dike system (fishing, canoeing, or kayaking in the South Channel Savannah River, etc.)?
- Should the monument's boundary be expanded to include sites of union batteries that are not currently protected?

- Should interpretive programs and displays emphasize primarily the strategies, people, and technology (rifled cannon) associated with the siege and capture of Fort Pulaski in April 1862 or should equal attention be paid to the causes of the Civil War, the use of the fort as a refuge for escaped or freed slaves, the pre-Civil War history of the construction of the fort, and other historical events?

## ISSUES

The NPS planning team completed the initial scoping phase of the planning process by meeting with other federal agencies; state and local agencies; and a variety of partners, stakeholders, and other interested parties. The result was a wide-ranging list of concerns and suggestions for the National Park Service to consider in developing the general management plan.

The team received approximately 70 comments and suggestions during scoping. Many of the comments and suggestions fell into the following four categories:

- **Interpretation** — The team received suggestions for including and expanding the interpretation of African American experiences at Fort Pulaski. Other contributors noted the growth in ecotourism and natural history interpretation and recommended increasing programs in these areas. The military history of the fort and its connection to the larger military history of Savannah was also a theme recommended for the monument's interpretive program.
- **Boundary expansion** — The protection and possible acquisition of federal batteries was a common element in this category.
- **U.S. Highway 80 widening** — Many respondents emphasized both the need for participation in project planning to protect the monument's

resources and realization of opportunities to benefit Fort Pulaski through improved access, safety, vehicle pull-offs, and terrapin exclusion devices.

- **Wetlands/Marsh** — The vast salt marsh on the south side of U.S. Highway 80 evoked several comments from our partners and stakeholders. The identification and delineation of wetland boundaries was one focus. Another theme was the need to protect water quality and biodiversity in the salt marsh ecosystem.

## IMPACT TOPICS — RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS

An important part of planning is seeking to understand the consequences of making one decision over another. To this end, NPS general management plans are typically accompanied by full environmental impact statements. Environmental impact statements identify the anticipated impacts of possible actions on resources and on park visitors and neighbors.

Impact topics are specific natural, cultural, or socioeconomic resources or values (including visitor use and experience and park operations) that could be affected by implementation of any of the alternatives described in the general management plan, including the no-action alternative. Impacts to these resources or values must be identified, and the intensity or magnitude, duration, and timing of the effect to each resource must be disclosed in the environmental consequences section of the environmental impact statement.

The impact topics identified for this general management plan are outlined in this section; they were identified based on federal laws and other legal requirements, Council on Environmental Quality guidelines, NPS management policies, staff subject-matter expertise, and issues and concerns expressed

by the public and other agencies early in the planning process. The planning team selected the impact topics for analysis based on the potential for each topic to be affected by the alternatives. Also included is a discussion of some impact topics that are commonly addressed in general management plans, but are dismissed from detailed analysis in this plan for the reasons given.

## IMPACT TOPICS TO BE CONSIDERED

### Cultural Resources

The National Historic Preservation Act and the National Environmental Policy Act require that the effects of any federal undertaking on cultural resources be taken into account. Also, NPS *Management Policies 2006* and *Cultural Resource Management Guidelines* (Director's Order 28) call for the consideration of cultural resources in planning proposals, and taking into account the concerns of traditionally associated peoples and stakeholders when making decisions about the monument's cultural resources. Actions proposed in this plan are focused in large part on the historic fort and surrounding environs, and thus could affect archeological resources, historic structures, cultural landscapes, ethnographic resources and museum collections.

**Archeological Resources.** Regulations implementing the Archeological Resources Protection Act define archeological resources to be any material remains of human life or activities which are at least 100 years of age, and which are of archeological interest. Of archeological interest means capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation and explanation. Below ground resources associated with the construction of Fort Pulaski include remains of the construction village, roadways, and mortar batteries.

Dredge spoil deposited on the north shore of the island by the U.S. Army Corps of Engineers has covered the archeological remains associated with the northern portion of the construction village. Because these and other archeological resources could be affected by the proposed alternatives, this topic was retained for further analysis.

**Historic Structures.** Historic structures served and may continue to serve some form of human activity and are generally immovable. They include buildings and monuments, canals, bridges, roads, defensive works, and ruins of all structural types. At Fort Pulaski there are 23 historic structures that include the fort, the fort moat, dikes, cisterns, various ruins, Battery Horace Hambright, and the Cockspur Island Lighthouse. These are among the most fundamentally important resources of Fort Pulaski National Monument and because one or more of the alternatives when implemented may affect them, this topic is retained for further analysis.



David Libman, National Park Service

FORT PULASKI ARCHES

**Cultural Landscapes.** Cultural landscapes are complex resources that range from large rural tracts covering several thousand acres to formal gardens of less than an acre. Natural features such as landforms, soils, and vegetation are not only part of the cultural landscape, they provide the framework within which it evolves. In the broadest sense, a cultural landscape is 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. Because some of these landscapes will be affected in different ways by alternatives in this plan, this topic is retained for further analysis.

**Museum Collections.** Museum objects are material things possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection. Large or immovable properties, such as monumental statuary, trains, nautical vessels, cairns, and rock paintings, are defined as structures or features of sites. Fort Pulaski National Monument has an extensive museum collection with the majority of the collection housed on site. None of the alternatives in this general management plan are expected to have greater than negligible effects on museum collections. However, for purposes of consultation pursuant to Section 106 of the National Historic Preservation Act, this topic is retained for further analysis.

**Ethnographic Resources.** Ethnographic resources are landscapes, objects, plants and animals, or sites and structures that are important to a people's sense of purpose or way of life. In other words ethnographic resources are the kinds of resources managed by many other branches of the National Park Service, but understood from the viewpoint of peoples or groups for which they have a special importance different from that enjoyed by the public. There are several types of studies and research that the National Park Service uses to determine the extent of ethnographic resources in a particular park. The most comprehensive background study, the ethnographic overview and assessment, reviews existing information on park resources traditionally valued by stakeholders. The information comes mostly from archives and publications; interviews with community members and other constituents—often on trips to specific

sites—supply missing data. This study also identifies the need for further research. Fort Pulaski National Monument has not yet been the subject of such an assessment and therefore the existence (or nonexistence) of ethnographic resources is undocumented.

However, research by Dr. Charles J. Elmore (*General David Hunter's Proclamation: The Quest for African-American Freedom Before and During the Civil War*) and other records demonstrate that there are traditional attachments and connections between the African American community in the Savannah, Georgia area and Fort Pulaski National Monument. However none of the alternatives in this draft general management plan are expected to have greater than negligible impacts on these traditional attachments. However, for purposes of consultation pursuant to Section 106 of the National Historic Preservation Act, the topic of ethnographic resources is retained for further analysis. Chapter 2 of this general management plan / wilderness study / environmental impact statement recommends the initiation and completion of an ethnographic overview and assessment.



**ESCAPING TO FORT PULASKI – FORMER AND ESCAPED  
SLAVE MARCH HAYNES STANDING IN BOAT**

## Natural Resources

**Geology and Soils.** The geology and soils of Cockspur and McQueens islands reflect a somewhat varied environment and a complex history. The soils can be affected by construction, restoration, and visitor use. Geologic processes and formations can likewise be affected by these factors, as well as by offsite activities. Alternatives in this plan could have an adverse or beneficial impact on geology and soils; thus this topic has been retained for analysis.

**Plant Communities and Vegetation.** Fort Pulaski National Monument has a variety of vegetation typical of the maritime and estuarine environment. It also has a significant amount of nonnative invasive vegetation. Alternatives presented in this plan could affect native and invasive nonnative vegetation; thus this topic has been retained for analysis.

**Fish and Wildlife.** Fort Pulaski National Monument is home to a variety of fish, birds, and other wildlife. Alternatives presented in this plan could affect wildlife and fish species or important habitat; thus this topic has been retained for analysis.

**Water Quality.** Effects on water quality are regulated by NPS policies and the Clean Water Act (33 U.S.C. 1344). National Park Service *Management Policies 2006* § 4.6.3 states that the National Park Service will

“take all necessary actions to maintain or restore the quality of surface waters and groundwaters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations. . . .”

Surface water resources in the Fort Pulaski National Monument area of interest include the Atlantic Ocean, the Savannah River, miscellaneous tidal creeks, and the salt marshes of McQueens Island. Implementation of any of the action alternatives could result in increased sedimentation of surface water resources in

the park. Therefore, this topic has been retained for analysis.

**Wetlands and Floodplains.** Executive Order 11990, “Protection of Wetlands,” requires federal agencies conducting certain activities to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid new construction in wetlands if a practicable alternative exists. The National Park Service must determine if proposed actions will be in or will affect wetlands. If so, the responsible official shall prepare a wetlands assessment (statement of findings), which will be part of this environmental impact statement. There are two types of wetlands in the monument that could be affected by implementation of any of the action alternatives — palustrine and estuarine — so this topic is retained for analysis.

Executive Order 11988, “Floodplain Management,” requires federal agencies to evaluate the potential effects of actions they may take in a floodplain to avoid, to the extent possible, adverse effects associated with direct and indirect development of a floodplain. If so, staff will prepare a floodplain assessment (statement of findings). The assessment will become part of the environmental assessment or environmental impact statement. The alternatives in this plan propose leaving facilities in floodplains or removing them; thus this topic has been retained for analysis.

## Wilderness Resources and Values

The Wilderness Act of 1964 (16 U.S.C. §§ 1131-1136) established the National Wilderness Preservation System, a network of federal lands set aside for the permanent preservation of their wilderness character. Only Congress has the authority to designate new wilderness areas.

As required by NPS *Management Policies 2006* § 6.2.1 and Director’s Order 41 (*Wilderness Preservation and Management*), the National Park Service has prepared a



wilderness eligibility assessment that identifies those areas at Fort Pulaski National Monument meeting the criteria for future designation as wilderness (please see appendix B). This assessment, in turn, has served as the basis for a formal “wilderness study,” as required by NPS *Management Policies 2006* § 6.2.2. The purpose of a wilderness study is to develop a proposal to Congress regarding the designation of wilderness at a particular park unit.

The wilderness study included in this document proposes that Congress designate most of the salt marsh of McQueens Island as wilderness. The designation of wilderness, should it occur, could have impacts on monument resources, monument operations, and visitor experience. At the same time, the draft general management plan prescribes management goals and activities that have the potential to affect the wilderness character of the areas proposed for designation. Therefore, this topic has been retained for analysis.

### Visitor Use and Experience

The Organic Act and NPS *Management Policies 2006* direct the National Park Service to provide visitors with enjoyment opportunities appropriate to the superlative resources found in the park. Actions in the alternatives could affect the types of facilities available to monument visitors, as well as the ability of visitors to engage in recreational activities. Actions in the plan could also affect the degree of visitor understanding and appreciation of monument resources. Therefore, this topic has been retained for analysis.

### Socioeconomic Environment

The National Environmental Policy Act requires an examination of social and economic impacts caused by federal actions as part of a complete analysis of the potential impacts of these actions on the “human environment.” Chatham County and the

cities of Savannah and Tybee Island make up the affected area for the socioeconomic analysis. Private sector businesses, including visitor service facilities and operators (e.g., restaurants and motels) could be affected by the actions proposed in this management plan. Therefore, this topic has been retained for analysis.

### Climate Change

All national park system units are affected by climate change, but coastal units such as Fort Pulaski National Monument are perhaps more immediately vulnerable to the effects of global warming such as sea level rise and more violent and frequent storm events than more terrestrial parks. Therefore, this topic has been retained for analysis.

This impact topic looks at both the impacts of climate change on the monument and how the monument might have to adapt to such change as well as the monument’s carbon footprint and how the monument can become more carbon neutral. Coastal national park system units must consider long-term management plans to counteract the negative impacts of sea-level rise on vulnerable coastal areas. The National Park Service and the U.S. Geological Survey have developed Coastal Vulnerability Index maps for a number of coastal parks. These maps identify coastal areas sensitive to sea-level rise, and will allow managers to take precautions necessary for their protection.

### Transportation

Providing access to Fort Pulaski National Monument is a public and monument concern. Alternatives proposed in this plan could affect visitor access. In addition, the proposed widening of U.S. Highway 80 through the monument could affect both access and monument resources. Therefore, this topic has been retained for analysis.

## Park Operations

Staffing, funding needs, and monument priorities may change under some of the alternatives. Therefore, this topic has been retained for analysis.

## Energy Requirements, Depletable Resources, and Conservation Potential

The National Park Service strives to use sustainable practices and technology and reduce its impact on natural or depletable resources. Under all of the alternatives, ecological principles would be applied to ensure that the monument's natural resources were maintained and conserved. However, the use and consumption of fuel and other nonrenewable resources for NPS operations, activities, and development would continue and vary among the alternatives. Therefore, this topic has been retained for analysis.

## IMPACT TOPICS CONSIDERED BUT NOT ANALYZED IN DETAIL

The following topics were considered for detailed analysis, but dismissed for the reasons indicated.

## Air Quality

The monument is located in an area that has been designated Class II under the Clean Air Act. By policy, the National Park Service seeks to perpetuate the best possible air quality in parks in order to preserve natural and cultural resources, and to sustain visitor enjoyment, human health, and scenic vistas. See *NPS Management Policies 2006* § 4.7.1. The contribution of pollutants resulting from implementing any of the alternatives would be negligible compared to current levels. Therefore, air quality has been dismissed from further consideration.

## Special Status Species

Analysis of the potential impacts on special status species (federal or state endangered, threatened, candidate, or species of concern) is required by the federal Endangered Species Act, NPS management policies, the National Environmental Policy Act, and other laws and regulations. Thirteen special status species have been observed at Fort Pulaski National Monument (see table 2). None of the alternatives presented in this document have the potential to substantially affect any special status species or habitat. Land disturbance under all of the action alternatives will be relatively minor, and will mostly involve removal of exotic, and some native, vegetation to restore selected historic sight lines. One alternative would involve moving the asphalt parking area to a new location, but this new location does not provide habitat to special status species.

In accordance with the Endangered Species Act and relevant regulations at 50 Code of Federal Regulations Part 402, the National Park Service determined that the management plan is not likely to adversely affect any federally threatened or endangered species and sent a copy of this draft general management plan to the U.S. Fish and Wildlife Service office with a request for written concurrence with that determination. In addition, the National Park Service has committed to consult on future actions conducted under the framework described in this management plan to ensure that such actions are not likely to adversely affect threatened or endangered species.

## Coastal Zone Management

The Coastal Zone Management Act, 16 U.S.C. § 1451 et seq., requires that all federal activities in coastal areas be consistent with approved state coastal zone management programs to the maximum extent possible. Georgia's coastal zone management program requires a consistency determination for any general management plan generated by the National Park Service for a monument in the Georgia coastal zone.

**TABLE 2. SPECIAL STATUS SPECIES — CHATHAM, EFFINGHAM, AND JASPER COUNTIES**

Common Name	Scientific Name
Birds	

Common Name	Scientific Name
American oystercatcher*	Haematopus palliatus
Bachman's warbler	Vermivora bachmanii
Bald eagle*	Haliaeetus
Gull-billed tern*	leucocephalus
Least tern*	Sterna nilotica
Peregrine falcon*	Sterna antillarum
Piping plover*	Falco peregrinus
Red-cockaded woodpecker	Charadrius melodus
Swallow-tailed kite*	Picoides borealis
Wilson's plover *	Elanoides forficatus
Wood stork*	Charadrius wilsonia
	Mycteria Americana
<b>Reptiles</b>	
Eastern indigo snake	Drymarchon couperi
Gopher tortoise	Gopherus polyphemus
Spotted turtle	Clemmys guttata
Green sea turtle	Chelonia mydas
Hawksbill sea turtle	Eretmochelys imbricate
Kemp's ridley sea turtle	Lepidochelys kempii
Leatherback sea turtle	Dermochelys coriacea
Loggerhead sea turtle*	Caretta caretta
<b>Amphibians</b>	
Flatwoods salamander	Ambystoma cingulatum
Dwarf siren	Pseudobranchius striatus
<b>Mammals</b>	
Rafinesque's big-eared bat	Corynorhinus rafinesquii
Humpback whale	Megaptera novaeangliae
Right (northern) whale	Eubalaena glacialis
West Indian manatee*	Trichechus manatus
<b>Plants</b>	
Chaffseed	Schwalbea Americana
Dwarf witch-alder	Fothergilla gardenia
Narrowleaf obedient plant	Physostegia leptophylla
Pondberry	Lindera melissifolia
Pondspice	Litsea aestivalis
Tidal marsh obedient plant	Physostegia leptophylla
Florida privet*	Forestiera segrata
Swamp dock*	Rumex verticillatus
<b>Fish</b>	
Shortnose sturgeon	Acipenser brevirostrum

1 Source: Rabolli and Ellington (1999); Govus (1998).

2 \*Indicates species that have been observed in the  
3 park.

4 The National Park Service does not propose  
5 any development in any area of Fort Pulaski  
6 National Monument that would conflict with

7 the state coastal zone management program.  
8 A copy of this draft general management plan  
9 / wilderness study / environmental impact  
10 statement has been submitted to the Georgia  
11 Department of Natural Resources, Coastal  
12 Resources Division, for a consistency review.

## Soundscape

13 NPS *Management Policies 2006* (section 4.9)  
14 requires national park system unit managers  
15 to preserve the natural quiet and sounds  
16 associated with physical and biological  
17 resources (for example, the sounds of birds  
18 and flowing water). The natural soundscape  
19 (i.e. natural quiet) at Fort Pulaski is a special  
20 resource to park visitors. None of the action  
21 alternatives in this plan would result in long-  
22 term alteration of the soundscapes in the  
23 park. Efforts to preserve natural soundscapes  
24 in the monument would continue. Some  
25 short-term impacts from construction  
26 projects may occur for brief periods in the  
27 future, but impacts would be negligible.  
28 Degradation of the natural soundscape could  
29 occur as a result of activities outside the  
30 monument boundary (e.g., possible  
31 expansion of U.S. Highway 80), but the  
32 impacts at this point are largely speculative.  
33 Therefore, this topic was dismissed from  
34 further analysis.

## Lightscape Management (Dark Night Sky Preservation)

35 Light pollution is pervasive in the park,  
36 originating primarily from Tybee Island and  
37 the city of Savannah. The National Park  
38 Service strives to minimize the intrusion of  
39 artificial light into the night scene by limiting  
40 the use of artificial outdoor lighting to basic  
41 safety requirements, shielding the lights when  
42 possible, and using minimal impact lighting  
43 techniques. The level and type of new  
44 development and lighting proposed in this  
45 plan is minimal. The effects of the actions in  
46 this plan on natural lightscapes would be  
47 negligible. Therefore, lightscapes were  
48 dismissed from further analysis.

## **Urban Quality and Design of the Built Environment**

1 The quality of urban areas is not a concern in  
2 this planning project. Vernacular architecture  
3 and park-compatible design would be  
4 considered for any new structures built under  
5 the alternatives. Emphasis would be placed  
6 on designs, materials, and colors that blend in  
7 and do not detract from the natural and built  
8 environment. Therefore, adverse impacts are  
9 anticipated to be negligible. No further  
10 consideration of this topic is necessary.

## **Socially or Economically Disadvantaged Populations**

11 Executive Order 12898 (“Federal Actions to  
12 Address Environmental Justice in Minority  
13 Populations and Low-Income Populations”) requires all federal agencies to incorporate  
14 environmental justice into their missions by  
15 identifying and addressing  
16 disproportionately high and adverse human  
17 health or environmental effects of their  
18 programs and policies on minorities and low-  
19 income populations and communities. None  
20 of the alternatives considered in this  
21 document would result in any identifiable  
22 adverse health effects, and none of the  
23 impacts on the natural and physical  
24 environment would significantly and  
25 adversely affect any minority or low-income  
26 population or community. Therefore,  
27 environmental justice was dismissed as an  
28 impact topic.  
29

## **Prime and Unique Agricultural Lands**

30 Council on Environmental Quality  
31 regulations require that federal agencies  
32 assess the effects of their actions on farmland  
33 soils classified by the Natural Resource  
34 Conservation Service as prime or unique.  
35 According to the Natural Resource  
36 Conservation Service, none of the soils in the  
37 project area are classified as prime or unique.  
38 Therefore, this topic was dismissed from  
39 further consideration.

## **Indian Sacred Sites and Indian Trust Resources**

40 Executive Order 130007 (“Indian Sacred  
41 Sites”) requires all federal agencies to  
42 determine whether their proposed actions  
43 would restrict access to or ceremonial use of  
44 Indian sacred sites by Indian religious  
45 practitioners or adversely affect the integrity  
46 of such sacred sites. Secretarial Order 3175  
47 requires that any anticipated impacts on  
48 Indian trust resources from a proposed  
49 action or project by a Department of the  
50 Interior bureau be explicitly addressed in  
51 environmental compliance documents.

52 None of the alternatives considered in this  
53 document would restrict access to any sites  
54 sacred to American Indians or limit  
55 ceremonial use of any such sites. None of the  
56 alternatives would affect Indian trust  
57 resources. Components of the plan designed  
58 to achieve enhanced management of cultural  
59 resources and a reduction in illegal relic  
60 hunting would have an overall beneficial  
61 effect on any Indian sacred sites. Therefore,  
62 this topic was dismissed from further  
63 consideration.

## **Public Health and Safety**

64 The proposed developments and actions in  
65 the alternatives would not result in any  
66 identifiable impacts on human health or  
67 safety. Therefore, this topic was dismissed  
68 from further consideration.

## **Conformity with Local Land Use Plans**

69 Land use at Fort Pulaski National Monument  
70 is consistent with local land use plans and  
71 regulations. The creation of additional visitor  
72 use opportunities in the monument as  
73 proposed in the alternatives would be  
74 consistent with existing land uses or local  
75 (non-National Park Service) land use plans,  
76 policies, or controls for the area. Designation

1 of wilderness would not conflict with local  
2 land use nor would it prevent traditional  
3 motorboat use of creeks in the salt marsh,  
4 because the Wilderness Act allows motorboat  
5 use to continue when this use has already  
6 become established (*NPS Management*  
7 *Policies 2006, Section 6.4.3.3*). Therefore, this  
8 topic was dismissed from further  
9 consideration.

## IMPAIRMENT DETERMINATION

10 Although Congress has given the National  
11 Park Service the management discretion to  
12 allow some adverse impacts within parks,  
13 that discretion is limited by the statutory  
14 requirement (generally enforceable by the  
15 federal courts) that the Park Service must  
16 leave park resources and values unimpaired  
17 unless a particular law directly and  
18 specifically provides otherwise. This, the  
19 cornerstone of the Organic Act, establishes  
20 the primary responsibility of the National  
21 Park Service. It ensures that park resources  
22 and values will continue to exist in a  
23 condition that will allow the American people  
24 to have present and future opportunities for  
25 enjoyment of them.

26 The impairment of park resources and values  
27 may not be allowed by the National Park  
28 Service unless directly and specifically  
29 provided for by legislation or by the  
30 proclamation establishing the park. The  
31 relevant legislation or proclamation must  
32 provide explicitly (not by implication or  
33 inference) for the activity, in terms that keep  
34 the National Park Service from having the  
35 authority to manage the activity so as to avoid  
36 the impairment.

37 The impairment that is prohibited by the  
38 Organic Act and the General Authorities Act  
39 (see appendix A for specific citations.) is an  
40 impact that, in the professional judgment of  
41 the responsible NPS manager, would harm

42 the integrity of park resources or values,  
43 including the opportunities that otherwise  
44 would be present for the enjoyment of those  
45 resources or values. Whether an impact  
46 meets this definition depends on the  
47 particular resources and values that would be  
48 affected; the severity, duration, and timing of  
49 the impact; the direct and indirect effects of  
50 the impact; and the cumulative effects of the  
51 impact in question and other impacts.

52 An impact to any park resource or value may,  
53 but does not necessarily, constitute an  
54 impairment. An impact would be more likely  
55 to constitute impairment to the extent that it  
56 affects a resource or value whose  
57 conservation is

- 58 • necessary to fulfill specific purposes  
59 identified in the establishing  
60 legislation or proclamation of the  
61 park, or
- 62 • key to the natural or cultural integrity  
63 of the park or to opportunities for  
64 enjoyment of the park, or
- 65 • identified in the park's general  
66 management plan or other relevant  
67 NPS planning documents as being of  
68 significance.

69 An impact would be less likely to constitute  
70 impairment if it is an unavoidable result of an  
71 action necessary to preserve or restore the  
72 integrity of park resources or values and it  
73 cannot be further mitigated. An impact that  
74 may, but would not necessarily, lead to  
75 impairment may result from visitor activities;  
76 NPS administrative activities; or activities  
77 undertaken by concessioners, contractors,  
78 and others operating in the park.

79 A written impairment determination will be  
80 made for the preferred alternative and the  
81 draft version is found in appendix E of this  
82 document.