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**ALTERNATIVES,
INCLUDING THE
PREFERRED
ALTERNATIVE**

CHAPTER 2 — ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

Many aspects of the desired future condition of Fort Pulaski National Monument are defined in the establishing legislation, the national monument's purpose and significance statements, and the servicewide mandates and policies that were described earlier. Within these parameters, the National Park Service solicited input from the public, NPS staff, government agencies, and other organizations regarding issues and desired conditions for the national monument. Planning team members gathered information about existing visitor use and the condition of the national monument's facilities and resources. They considered which areas of the national monument attract visitors, and which areas have sensitive resources.

Using the previously described information the planning team developed a set of management prescriptions and two action alternatives to reflect the range of ideas proposed by NPS staff and the public.

This chapter describes the management zones and the alternatives for managing the national monument for the next 20 years. The National Park Service planning process requires development of action alternatives (alternatives B and C) for comparison with no change in current monument management and trends (no-action, alternative A). The chapter includes tables that summarize the key differences between the alternatives and the key differences in the impacts that are expected from implementing each alternative. (The summary of impacts table is based on the analysis in chapter 4, "Environmental Consequences.") This chapter also describes mitigative measures that would be used to lessen or avoid impacts, future studies that would be needed, and the environmentally preferred alternative.

MANAGEMENT ZONES AND ALTERNATIVES

The building blocks for reaching an approved plan for managing a national park system unit are the management zones and the alternatives. All are developed within the scope of the park's purpose, significance, mandates, and legislation. Management zones are descriptions of desired conditions for monument resources and visitor experiences in different areas of the park. Management zones are determined for each national park system unit; however the management zones for one unit will likely not be the same for any other national park system unit (although some might be similar). The management zones identify the widest range of potential appropriate resource conditions, visitor experiences, and facilities for the monument that fall within the scope of the park's purpose, significance, and special mandates. Five management zones have been identified for Fort Pulaski National Monument (see table 4 later in this chapter).

The alternatives in this general management plan would create different future directions for the monument using management zones. Each of the action alternatives has an overall management concept and a description of how different areas of the monument would be managed. The concept for each alternative presents the overall picture for the monument in the future. For example, perhaps one management zone is called "natural resource" and another zone is called "recreation." An alternative whose concept is to keep most of the monument in an undeveloped and natural condition would have more of the natural resource zone than the recreation zone. Both zones might also be larger or smaller and in different locations in different alternatives, depending on the overall concept for each alternative.

This draft general management plan / wilderness study / environmental impact statement presents three alternatives, including the NPS preferred alternative, for future management of Fort Pulaski National Monument. Alternative A, the “no-action” or “no-change” alternative, is a continuation of existing management direction, and is included as a baseline for comparing the consequences of implementing each alternative. The other “action” alternatives are designated B, (the NPS preferred alternative) and C. The action alternatives are different ways of managing resources and visitor uses. The two action alternatives embody the range of what the public and the National Park Service want to see accomplished with regard to natural resource conditions, cultural resource conditions, visitor use and experience, the socioeconomic environment, transportation, and monument operations at the national monument. The National Park Service would continue to follow existing agreements and servicewide mandates, laws, and policies regardless of the alternatives considered in this plan. However, actions or desired conditions not mandated by policy, law, or agreements can differ among the alternatives.

As noted previously in the “Guidance for Planning” section, the National Park Service would continue to follow existing agreements and servicewide mandates, laws, and policies regardless of the alternatives considered in this plan. These mandates and policies are not repeated in this chapter (see appendix A). However, other general management plan proposed actions *do* differ among the alternatives. These alternative actions are discussed in this chapter.

FORMULATION OF THE ALTERNATIVES

The alternatives focus on what resource conditions and visitor uses and experiences/opportunities should be at the monument rather than on details of how these conditions and uses/experiences should be achieved. Thus, the alternatives do

not include many details on resource or visitor use management.

More detailed plans or studies will be required before most conditions proposed in the alternatives are achieved. The implementation of any alternative also depends on future funding and staffing and environmental compliance. This plan does not guarantee that that funding will be forthcoming. The plan establishes a vision of the future that will guide day-to-day and year-to-year management of the monument, but full implementation could take many years.

IDENTIFICATION OF THE PREFERRED ALTERNATIVE

The National Park Service uses a decision-making system called Choosing by Advantages to select a preferred alternative in the general management planning process. This decision-making system is based on determining the advantages of different alternatives for a variety of factors. The fundamental rule in this system is that sound decisions must be based on the importance of advantages.

One of the greatest strengths of this system is its fundamental philosophy: decisions must be anchored in relevant facts. This minimizes the subjectivity in the decision-making process and makes the decision as objective as possible. For example, the question “Is it more important to protect natural resources or cultural resources?” is “unanchored”; it has no relevant facts on which to make a decision. Without such facts, it is impossible to make a defensible decision. The Choosing by Advantages system instead asks us to decide which alternative gives the greatest advantage in protecting natural resources and cultural resources. To answer this question, relevant facts would be used to determine the advantages that the alternatives provide for both kinds of resources. For example, we may have facts that show that two alternatives disturb or restore equal amounts of vegetation, so neither alternative would be

more advantageous than the other in protecting natural resources. On the other hand, we may have relevant facts that show that one alternative would disturb five known archeological sites, while the other alternative would disturb only one. This alternative, then, would be more advantageous because it provides natural resource protection (equal to the other alternative) and also provides the greatest advantage for cultural resources.

The planning team used the Choosing by Advantages system to select alternative B as the preferred alternative and it is the National Park Service's proposed action.

First, the planning team determined the factors that would be used in the decision. Those factors were based on the mission of the National Park Service and the purpose and significance of Fort Pulaski National Monument. Within the broader categories of factors, protection of cultural resources, protection of natural resources, and provision of visitor services and recreational opportunities, the team evaluated more specific resources and opportunities such as the extent to which each alternative would

- retain the integrity of the CCC era parking lot
- protect cultural resources by relocating the parking lot
- restore the 1862 viewshed
- restore the salt marsh
- remove exotic and invasive species
- interpret the construction village and the CCC era
- provide interpretation opportunities through viewshed restoration

The planning team discussed each alternative for each factor and reached a consensus regarding how each factor should be characterized for each of the 3 alternatives under consideration, including the no-action (continue current management policies and strategies) alternative. The next step was to decide which alternative had the greatest advantage over the others for each factor and which had no advantage. Finally, through

discussion and consensus the team decided a score for each advantage of between 0 and 100. The score of 100 was assigned to the advantage judged to be the greatest of all the advantages.

This process resulted in alternative B being substantially more advantageous in restoring the 1862 viewshed, protecting cultural resources such as the cemetery of veterans, removing exotic and invasive species, and in providing interpretation opportunities due to viewshed restoration than the other alternatives. Alternative A, because it continues current management practices, does not adequately address many of the issues that emerged during the early scoping process and therefore scored lowest in terms of total advantage.

Finally the scores were totaled for each alternative and compared with the estimated cost of each alternative. Because alternative B was only slightly higher in cost than alternative C while providing significantly more advantages, alternative B was selected as the NPS preferred alternative for this draft general management plan / wilderness study / environmental impact statement.

WILDERNESS STUDY

Congress established the National Wilderness Preservation System to ensure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States. Wilderness designation is intended to preserve and protect certain federally managed lands in their natural state and provide for compatible recreational opportunities, education, and scientific study. Wilderness areas are intended to contrast with lands where human activities dominate the landscape. Only Congress may designate lands for inclusion in the National Wilderness Preservation System.

Section 6.2.2 of *NPS Management Policies 2006* requires the National Park Service to conduct a formal wilderness study of any

lands previously found eligible for wilderness designation. As noted in chapter 1, approximately 4,500 acres of salt marsh at Fort Pulaski have been found eligible for designation as wilderness (see text of “Wilderness Eligibility Assessment” in appendix B). The purpose of a wilderness study is to evaluate options for designating wilderness and to develop a formal wilderness proposal. Each wilderness study must consider a range of alternatives for wilderness designation, including a “no wilderness” alternative. The resulting proposal will serve as the basis for any wilderness recommendation that the president may submit to Congress, should he choose to do so.

This wilderness study has been guided by the Wilderness Act of 1964, where wilderness is defined and its values are articulated. An important consideration for this analysis has been the traditional use of motorboats in the tidal creeks of McQueens Island. Designation of wilderness would not conflict with local land use nor would it prevent traditional motorboat use of creeks in the salt marsh, because the Wilderness Act allows motorboat use to continue when this use has already become established (*NPS Management Policies 2006, Section 6.4.3.3*).

Definition of Wilderness

The Wilderness Act (16 USC § 1132) defines wilderness in the following manner:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean . . . an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature,

with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Uses and Management in Wilderness

Section 4 of the Wilderness Act (16 USC § 1134) provides that designated wilderness areas are generally to be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use. This section of the act specifically directs federal agencies to protect the wilderness character of designated wilderness areas and prohibits certain uses deemed antithetical to the preservation of wilderness character. Permitted and prohibited uses in wilderness are summarized on the following page.

USES AND MANAGEMENT IN WILDERNESS

Although this study is not examining use or management of wilderness, the Wilderness Act and NPS policies permit and prohibit various uses, developments, and actions. These directions need to be considered in evaluating the impacts of the wilderness proposal.

Various recreational uses, management actions, and facilities are permitted in wilderness areas under the Wilderness Act and NPS policies. Among the uses, management actions, and facilities **permitted** in wilderness areas located in national monuments are:

- nonmotorized recreational uses (e.g., hiking, backpacking, picnicking, camping)
- use of motorboats where established use pre-dates wilderness designation
- fishing
- Native American religious activities and other actions recognized under treaty-reserved rights
- guided interpretive walks and onsite talks and presentation
- use of wheelchairs, service animals, and reasonable accommodations for the disabled that are not in conflict with the Wilderness Act (e.g., barrier-free trails, accessible campsites)
- scientific activities/research
- monitoring programs
- management actions taken to correct past mistakes or impacts of human use, including restoration of extirpated species, controlling invasive alien species, endangered species management, and protection of air and water quality
- fire management activities (including fire suppression)
- protection and maintenance of historic properties eligible for the National Register of Historic Places
- trails
- campsites
- certain administrative facilities if necessary to carry out wilderness management objectives (e.g., storage or support structures, ranger station)
- signs necessary for visitor safety or to protect wilderness resources
- uses and facilities permitted for landowners with valid property rights in a wilderness area

The Wilderness Act also specifically **prohibits** certain uses and developments. Under sections 21 and 41 of the act, the following uses are not permitted in a wilderness:

- permanent improvements or human habitation
- structures or installations
- permanent roads
- temporary roads
- use of motor vehicles (except motorboats, where established use pre-dates wilderness designation)
- use of motorized equipment
- landing of aircraft (except for emergency purposes)
- other forms of mechanical transport (e.g., bicycles)
- commercial enterprises (except for commercial services that are necessary for realizing the recreational or other wilderness purposes of the area, such as guiding and outfitting)
- With the exception of permanent roads, the act does recognize that the above uses **may be permitted** if necessary to meet the minimum requirements for the administration of the area as wilderness or for emergency purposes.

In addition to the above prohibitions, NPS policies **also prohibit** some developments:

- new utility lines
- permanent equipment caches
- site markings or improvements for nonemergency use
- borrow pits (except for small quantity use of borrow material for trails)
- new shelters for public use
- picnic tables
- interpretive signs and trails and waysides (unless necessary for visitor safety or to protect wilderness resources)

Wilderness Eligibility Assessment

In keeping with the requirements of NPS *Management Policies 2006*, an interdisciplinary NPS team consisting of the monument and Southeast Regional Office staff conducted an evaluation of the monument to determine those areas meeting the criteria for wilderness described in the Wilderness Act. The study area included lands and waters owned by both federal and state governments; however, only federal lands were evaluated for wilderness eligibility. To be eligible for wilderness designation, an area of federal land in the monument had to

- generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;
- be undeveloped and retain its primeval character and influence, without permanent improvements or human habitation;
- be untrammeled by man, where man himself is a visitor who does not remain;
- offer outstanding opportunities for solitude or a primitive and unconfined type of recreation; and
- be protected and managed so as to preserve its natural conditions.

The team first examined data to exclude from wilderness consideration lands clearly not meeting one or more of the previously described criteria, such as lands containing permanent improvements, (e.g., buildings, roads, and canals). The remaining lands were evaluated against the criteria and visited as necessary. All lands meeting the criteria and of such size that they could be managed as wilderness were determined to be eligible; all other lands were excluded from further wilderness consideration.

The wilderness eligibility assessment identified about 4,500 acres — approximately 84% of the monument's total acreage — as meeting wilderness criteria

outlined previously and being eligible for wilderness designation (see Figure 1: Draft Wilderness Eligibility Determination). Per NPS *Management Policies 2006* §6.3.1, the National Park Service will manage these lands to preserve their wilderness character until such time as congress takes final action either to include or exclude them from the National Wilderness Preservation System.

Areas that were determined not to be eligible (approximately 865 acres) did not meet wilderness criteria. For more information regarding how the eligibility determination was made, please refer to the "Wilderness Eligibility Assessment" in appendix B.

Options Analyzed in the Wilderness Study

All lands found eligible for wilderness designation were subsequently evaluated to determine whether, and if so where, wilderness should be designated within the monument, given the best available information about wilderness character, practical considerations, and public review and comment. As used in this document, the term *proposed wilderness* means an area that has wilderness characteristics and is proposed for wilderness designation by Congress.

Using the overall vision for each action alternative, the planning team investigated a range of possibilities for proposed wilderness. Ultimately, the study team concluded that an identical wilderness proposal, consisting of all lands eligible for designation, should be included in both action alternatives. This determination was based largely on the fact that the salt marsh environment on McQueens Island is more or less uniform throughout and thus any line-drawing to establish alternatives would be essentially arbitrary. Furthermore, none of the eligible land in the salt marsh lends itself to future uses inconsistent with wilderness designation.

Accordingly, this wilderness study proposes that Congress designate as wilderness approximately 4,500 acres of salt marsh on McQueens Island. The area proposed for designation includes all lands previously found eligible for wilderness designation at Fort Pulaski National Monument. This environmental impact statement analyzes the environmental consequences of this proposal.

This wilderness proposal, if finalized, will be forwarded to the president via the director of the National Park Service and the Secretary of the Interior. Both the director and the secretary will review the proposal and make adjustments, as appropriate. The Secretary of the Interior will then be responsible for recommending to the president those lands that are suitable or not suitable for inclusion in the National Wilderness Preservation System. After receiving the secretary's recommendation, the president will transmit his final recommendations with respect to wilderness designation to both houses of congress.

Until Congress acts on the president's recommendations, the National Park Service will manage all *eligible* lands — whether recommended for designation or not — in such a way as to protect their wilderness character and preserve their eligibility for future designation.

Management of Proposed Wilderness

Planning. National Park Service policies governing wilderness management apply equally to proposed and designated wilderness (see *NPS Management Policies 2006* § 6.3.1). In order to guide the preservation, management, and use of NPS wilderness areas, including proposed wilderness, a wilderness or backcountry management plan is typically developed. Such a plan would be developed for Fort Pulaski with public involvement and would contain measurable objectives for preservation of wilderness values as

specified in the Wilderness Act and NPS management policies. Wilderness management plans articulate management actions such as regulations, monitoring, and permit systems.

Management decisions affecting proposed wilderness will be consistent with the “minimum requirements” determination process. This is a documented process used to determine whether administrative activities affecting wilderness character or visitor experiences are necessary in wilderness, and if so, how the impacts from such activities can be minimized. The process requires managers to consider alternative approaches for accomplishing necessary tasks in wilderness, and provides a mechanism for determining the “minimum requirement” or “minimum tool” for accomplishing those tasks.

Recreational Use. Recreational uses of NPS wilderness are to be of a type and nature that enable areas to retain their undeveloped character and influence, protect and preserve natural conditions, leave the imprint of humans' work substantially unnoticeable, ensure that other visitors have outstanding opportunities for solitude or primitive and unconfined types of recreation, and preserve wilderness in an unimpaired condition. Canoeing, kayaking and fishing are appropriate uses of wilderness at Fort Pulaski National Monument. Motor boating is also an appropriate and allowed recreational activity in those areas where it is already an established use. See *NPS Management Policies 2006, Section 6.4.3.3*.

Emergency Services. In emergency situations involving human health and safety, the use of aircraft, motorboats, and other motorized or mechanical equipment is allowed in wilderness. Wildfires will be controlled as necessary to prevent loss of life, damage to property, the spread of wildfire to lands outside wilderness, or unacceptable loss of wilderness values. The use of tool caches, aircraft, motorboats, and motorized firefighting equipment may be

1 permitted for such control. Prescribed fire
2 and hazard fuel reduction programs may be
3 implemented according to approved plans.
4 The minimum requirement determination
5 process will be followed for all fire activities
6 in wilderness.

7 **Resource Management and Research.**

8 Wilderness designation does not prevent the
9 National Park Service from protecting and
10 maintaining historic and other cultural
11 resources located within wilderness areas.
12 Using the minimum requirement process,
13 these resources will be protected and
14 maintained according to the pertinent laws,
15 policies, and plans governing cultural
16 resources. Natural resource management
17 activities may be carried out in a similar

18 fashion, and will generally be undertaken
19 only to address the impacts of past or
20 current uses or influences originating
21 outside wilderness boundaries. Natural
22 processes will be allowed, insofar as
23 possible, to shape and control wilderness
24 ecosystems.

25 Scientific activities are appropriate in
26 wilderness. Even activities that involve a
27 potential impact to wilderness resources or
28 values (such as inventory, monitoring, and
29 research) are allowed when the benefits of
30 what can be learned outweigh the impacts
31 on wilderness resources or values. However,
32 all such activities must be evaluated using the
33 minimum requirement determination
34 process.



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MCQUEENS ISLAND MARSHES

The map displays the Fort Pulaski National Monument, which is outlined in green. Within this boundary, several areas are highlighted in yellow, indicating they are eligible for wilderness designation. These areas include the large central island, the northern section of the main island, and a small area on the eastern tip. The map also shows the surrounding waterways, including the Savannah River, Tybee River, and various creeks like Oyster Creek and Tybee Creek. Numerous islands and jetties are labeled, such as Jones Island, Bird Island, Long Island, Tybee National Wildlife Refuge, North Jetty, South Jetty, and Cockspar Island. A legend in the bottom left corner identifies the yellow areas as 'Eligible Wilderness Areas' and the green outline as the 'Monument Boundary'. A north arrow is located in the bottom left corner, and the National Park Service logo is in the top right corner.

USER (CARRYING) CAPACITY

General management plans for national park system units must address user capacity management. The National Park Service defines user capacity as the type and extent of use that can be accommodated while sustaining the quality of a park unit's resources and visitor experiences consistent with the park unit's purpose.

User capacity management involves establishing desired conditions, monitoring, and taking actions to ensure the park unit's values are protected. The premise is that with any visitor use comes some level of impact that must be accepted; therefore, it is the responsibility of the National Park Service to decide what level of impact is acceptable and what management actions are needed to keep impacts within acceptable limits.

Instead of just tracking and controlling the number of visitors, NPS staff manage the levels, types, and patterns of visitor use as needed to preserve the condition of the resources and quality of the visitor experience. The monitoring component of this process helps NPS staff evaluate the effectiveness of management actions and provides a basis for informed management of visitor use.

The foundation for user capacity decision making is the qualitative description of desired resource conditions, visitor experience opportunities, and general levels of development and management described in the management zones. Based on these desired conditions, indicators and standards are identified. An indicator is a measurable variable that can be used to track changes in resource and social conditions related to human activity, so that existing conditions can be compared to desired conditions. A standard is the minimum acceptable condition for an indicator.

User capacity decision making is a continuous process; decisions are adjusted based on monitoring the indicators and standards. Management actions are taken to

minimize impacts when needed. The indicators and standards included in this management plan would generally not change in the future. However, as monitoring of the park's conditions continues, managers may decide to modify, add, or delete indicators if better ways are found to measure important changes in resource and social conditions. Information on the NPS' monitoring efforts, related visitor use management actions, and any changes to the indicators and standards would be available to the public.

This draft general management plan / wilderness study / environmental impact statement addresses user capacity in the following manner:

- The management zones described earlier in this chapter provide the basis for managing user capacity. Each zone prescribes desired resource conditions, visitor experiences, and recreational opportunities for different areas of the park. The zones also prescribe the types and levels of development necessary to support these conditions, experiences, and opportunities. This element of the framework is the most important to long-term user capacity management in that it directs the National Park Service on how to best protect resources and visitor experiences while offering a diversity of visitor opportunities.
- The general management plan describes the monument's most pressing use-related resource and visitor experience concerns, existing and potential, given the monument's purpose, related desired conditions, and the vulnerability of specific resources and values. This helps NPS managers focus limited resources on the most significant indicators.
- Table 3 identifies indicators and standards that will be monitored in the future to determine if desired conditions are not being met due to

1	unacceptable impacts from visitor use	5	minimize unacceptable impacts from
2	and also provides representative	6	visitor use.
3	examples of management strategies	7	• The user capacity analysis establishes
4	that might be used to avoid or	8	priorities for monitoring attention, if
		9	appropriate.

TABLE 3. INDICATORS AND STANDARDS

Indicator	Applicable Zone	Standard	Management Strategies
Indicator Topic: Vehicle safety and congestion at the entrance road (e.g., wait times for visitors to turn into the monument, back-ups onto U.S. Highway 80 from the entrance gate, accidents as a result of no turn lanes, no acceleration/deceleration lanes and limited sight distance).			
Number of cars waiting at the monument entrance	Visitor Services Zone	No more than 2 tour buses or 5-6 personal vehicles lined up in a lane* *based on current entry configuration	Pretrip planning information to encourage voluntary redistribution of use to off-peak days and times Real time information about the wait time at the monument entrance Increased staff to attend to vehicles within the monument to aid queuing and fee collection at the entrance Additional temporary entrance lanes Increased coordination with the Department of Transportation and other partners to redesign the entry and manage traffic and speeds on U.S. Highway 80
Incidences of accidents associated with the entrance to the monument	Visitor Services Zone	No more than 1 accident per year	Pretrip planning information to encourage voluntary redistribution of use to off-peak days and times Site management (e.g., vegetation clearing) Increased staff to attend to vehicles within the monument to aid queuing and fee collection at the entrance Increased coordination with Department of Transportation and other partners to redesign the entry and manage traffic and speeds on U.S. Highway 80
Indicator Topic: Organized group conflicts in the fort (e.g., if two or more groups overlap, impacts such as noise and crowding can result so groups need to remain dispersed throughout the fort), including impacts from unmanaged behavior in organized groups (e.g., noise, depreciative behavior)			
Number of organized groups in any area of the fort at one time	Historic Setting Zone	One organized group per designated area	Pretrip planning information, including targeted contact with organized groups Coordinate the arrival (day and time) and distribution of organized groups within the monument via a reservation system Onsite contact with individual visitors and groups to provide information and direct use, in order to avoid conflicts Roving staff for orientation and information

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Indicator	Applicable Zone	Standard	Management Strategies
Number of chaperones to minors in organized groups	Historic Setting Zone	One chaperone per 10 minors in organized groups	Pretrip planning information, including targeted contact with organized groups Continue to require advanced reservations and contact with monument staff Provide chaperone support, if available
Number of groups showing up without a reservation	Historic Setting Zone	No more than 2 unannounced groups per day	Pretrip planning information, including targeted contact with organized groups Continue to require advanced reservations Increased staffing and coordination to distribute groups throughout the monument to avoid crowding and conflicts
People at one time at the visitor center	Visitor Services Zone	No more than 100 people at one time at the visitor center* * based on current building configuration	Pretrip planning information to encourage voluntary redistribution of use to off-peak days and times Advanced reservations and coordination of organized groups Increased staffing and coordination to distribute visitor use onsite
Incidences of unauthorized parking of buses	Visitor Services Zone	No unauthorized bus parking allowed	Education on regulations Enforcement of regulations
Indicator Topic: Impacts associated with the lighthouse as a result of improved access to the site (e.g., damage, wear, crowding, safety incidences)			
Degree of wear or incidences of damage to the lighthouse structure (stairs, walls, guardrail, etc.)	Historic Setting Zone	No noticeable/significant wear* or damage to the lighthouse structure *as evaluated by regular cultural resource evaluations of trained personnel	Education on safety concerns and appropriate behaviors Site management to enhance durability and prevent damage that is consistent with maintaining the site's integrity Regulating access (e.g., limiting the amount of use, guide only access) Temporary or permanent closure
Incidences of reported visitor accidents associated with accessing the lighthouse, within NPS jurisdiction	Historic Setting Zone	No more than 5 reported accidents per year associated with accessing the lighthouse	Education on safety concerns and appropriate behaviors Site management to enhance safety that is consistent with maintaining the site's integrity Regulating access (e.g., limiting the amount of use, guide only access) Temporary or permanent closure
Indicator Topic: Incidences of unsafe and depreciative behavior (e.g., sitting/climbing on canons, fort walls, earth mounds), including incidences of graffiti (e.g., adding current names/dates to historic graffiti wall)			
Incidences of observed unsafe and depreciative behavior (graffiti, theft, sitting/climbing on canons, fort walls, earth mounds)	Historic Setting Zone	No incidences of observed unsafe and depreciative behavior	Education on appropriate behaviors (signage kept to a minimum, with an emphasis on direct contact and publications) Regulations Temporary or permanent physical barriers Temporary or permanent closures

MANAGEMENT ZONES FOR FORT PULASKI NATIONAL MONUMENT

1 Management zones are descriptions of
2 desired conditions for monument resources
3 and visitor experiences in different areas of
4 the park. Management zones are determined
5 for each national park system unit; however,
6 the management zones for one unit will likely
7 not be the same for any other national park
8 system unit (although some might be similar).
9 The management zones identify the widest
10 range of potential appropriate resource
11 conditions, visitor experiences, and facilities
12 for the monument that fall within the scope
13 of the monument's purpose, significance, and
14 special mandates. Five management zones
15 have been developed for Fort Pulaski
16 National Monument. It is important to note
17 that the names of the zones are only general
18 indications of their character. For example,
19 the name Historic Setting Zone should not be

20 interpreted to mean that there are no natural
21 resources within the zone, nor does the name
22 Natural Resource Preservation Zone imply
23 that cultural resources either do not exist or
24 will not be preserved within the zone. The
25 details of how the zones will be managed and
26 the conditions to be achieved are spelled out
27 in table 4, which follows.

28 In formulating the action alternatives
29 (alternatives B and C), management zones
30 were placed in different locations or
31 configurations on a map of the monument
32 according to the overall intent (concept) of
33 each of the alternatives. (Because alternative
34 A represents existing conditions, and there
35 are no existing management zones, the
36 alternative A map does not show the
37 management zones.) Please note that
38 privately owned properties are not zoned,
39 even if they are within the authorized
40 national monument boundary.



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AERIAL PHOTO OF FORT PULASKI

TABLE 4. MANAGEMENT ZONE DESCRIPTIONS FOR FORT PULASKI NATIONAL MONUMENT

	Visitor Services Zone	Administrative Services Zone	Historic Setting Zone	Natural Resource Preservation Zone	Recreation Zone
Desired Resource Conditions	<ul style="list-style-type: none"> Necessary visitor facilities in this zone would be placed as unobtrusively as possible in an appropriate setting. The area would be modified for visitor access and monument operations in a way that aesthetically blends with the natural and cultural environment. 	<ul style="list-style-type: none"> Nonhistoric elements such as maintenance facilities, administrative offices, and facilities of cooperating partners, would predominate in this type of zone. Minimizing the impacts of these facilities on the natural and cultural resources of the national monument would be a high priority. A moderate level of native, noninvasive landscape plantings such as grass, shrubs, small trees, flowers, and ground covers could be introduced and maintained to improve the visual appeal of the structures. 	<ul style="list-style-type: none"> Cultural resources in this zone could accommodate expanded visitor use, while maintaining historic resource integrity and while representing the period of significance to the greatest degree feasible. Some resources would be stabilized at the existing condition. Restore and maintain historic scene while screening for modern intrusions. There would be minimum tolerance for adverse visitor impact. 	<ul style="list-style-type: none"> This zone would remain an undisturbed, nearly pristine natural environment. It would be carefully protected from resource degradation. Some modification could occur to prevent resource degradation. Generally, the area would exhibit the free play of natural forces and natural ecosystem succession. 	<ul style="list-style-type: none"> This area would provide opportunities for visitors to recreate, yet resources would remain largely intact. The environment might be adapted for access and human use. Sounds and sights of human activity might be apparent. There would be tolerance for minor resource impacts.
Desired Visitor Experience	<ul style="list-style-type: none"> This area would provide for a high level of visitor activity and administrative operations. In this zone visitors would enter the national monument and they would have opportunities to receive orientation and information, interact with monument staff and other visitors, and experience and learn about the monument's physical resources and interpretive themes. 	<ul style="list-style-type: none"> Visitors would not typically enter this zone. Should they enter, either unintentionally or to obtain information or assistance, they might encounter maintenance or administrative buildings, equipment, machinery in operation, loud sounds, and monument staff. 	<ul style="list-style-type: none"> Observation, education, reflection, and learning would be the primary visitor experiences desired. Living history demonstrations and interpretive programs could occur in this zone type. Visitors could also find the opportunity for solitary, individual exploration and discovery, quiet, and reflective experiences. Appropriate recreational activities permitted. 	<ul style="list-style-type: none"> The visitor would perceive the area to be undisturbed and essentially natural. Visitors would appreciate the beauty of the area and gain new understanding of the forces of nature in the coastal environment. Access would be limited to waterways and designated trails. The probability of seeing or encountering other visitors or monument staff would be low most of the time. 	<ul style="list-style-type: none"> Visitors would have a variety of opportunities to participate in recreational activities and interpretive programs. Providing opportunities for people to interact with the resources in this area would be important. The probability of seeing or encountering other visitors or monument staff would range from low to moderate most of the time.

	Visitor Services Zone	Administrative Services Zone	Historic Setting Zone	Natural Resource Preservation Zone	Recreation Zone
Appropriate Kinds and Levels of Development	<ul style="list-style-type: none"> A visitor center with restrooms, drinking water fountains, museum, fee-collection facility, roads, parking, and walkways are the types of facilities found in this zone. 	<ul style="list-style-type: none"> The facilities found in this zone could include maintenance buildings, vehicle storage facilities, monument offices, roads, parking areas, utilities, and artifact storage buildings as well as facilities, monument housing, and equipment storage structures of cooperating partners. 	<ul style="list-style-type: none"> The minimum development necessary for visitor access, safety, resource protection, and interpretive purposes would occur in this zone. Development could include signage, trails, pathways, benches, or other appropriate facilities. 	<ul style="list-style-type: none"> There would be no buildings, comfort stations, or other structures in this zone. Some trails or interpretive markers would be possible in less environmentally sensitive areas. 	<ul style="list-style-type: none"> There would be specialized facilities or structures dedicated for recreational uses in this zone. There could be trails, campground, parking areas, or comfort stations in this zone. Additions to the landscape, including signs, markers, fishing piers, boat ramps, and accessibility features might be used to enhance visitor experience and public safety and to protect resources.
Appropriate Kinds and Levels of Management Activities	<ul style="list-style-type: none"> Management activities could include regular maintenance of both the structural and landscape elements in the zone, fee collection, interpretive services, and law enforcement. 	<ul style="list-style-type: none"> Moderate to intensive management in this zone would be directed toward maintenance of its buildings and grounds as well as staging and preparation for maintenance and resource protection activities in other zones. 	<ul style="list-style-type: none"> Management activities that could occur in this zone include interpretation, grounds maintenance, preservation, restoration, stabilization, visitor protection and law enforcement, and archeological investigations. Adaptive use of some cultural resources would also be permitted in this zone. 	<ul style="list-style-type: none"> Management activity in this zone would be minimal, only as necessary to maintain natural appearance and/or protect resources from degradation, protect areas from negative visitor impact and occasionally remove exotic species to promote health of the natural ecology. Cooperation with other entities having jurisdiction over natural resources would be an important aspect of management in this zone. 	<ul style="list-style-type: none"> Management actions would focus on enhancing visitor experience and safety, protecting resources, minimizing impacts from visitor use. Appropriate management actions could include the following: Determining types and levels of use (carrying capacity); Managing access based on the determined carrying capacity; and Conducting research and restoring and stabilizing resources.

	Visitor Services Zone	Administrative Services Zone	Historic Setting Zone	Natural Resource Preservation Zone	Recreation Zone
Appropriate Kinds and Levels of Visitor Activities	<ul style="list-style-type: none"> Visitor activities could include entering the national monument grounds, paying fees, and receiving orientation to the resources and programs of the national monument. 	<ul style="list-style-type: none"> Visitors would not typically enter this zone except to obtain information or assistance. 	<ul style="list-style-type: none"> Typical visitor activities in this zone could include participating in interpretive programs, viewing resources and interpretive displays, photography, and appropriate recreational pursuits. 	<ul style="list-style-type: none"> Visitor activities would be limited to low-impact activities such as kayaking/canoeing, bird watching, photography, and recreational fishing and shellfish harvesting. Use levels would likely remain low and would be monitored to assure achievement of zone objectives. 	<ul style="list-style-type: none"> Appropriate visitor activities could include sightseeing, picnicking, camping, boat launching, fishing, hiking, etc. Visitor activities might be self-directed or they might use interpretive services to plan their activities.



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