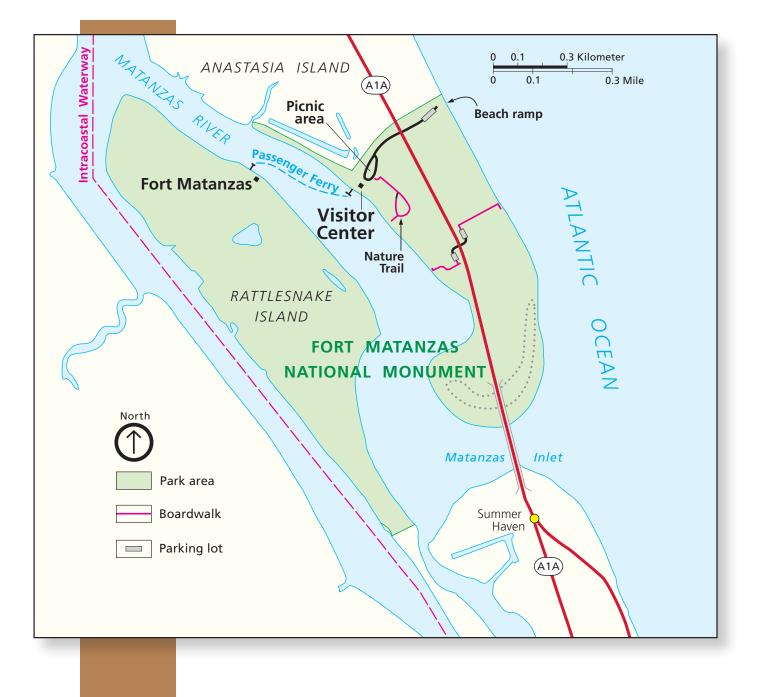
# Foundation Document Fort Matanzas National Monument Florida

June 2016





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# **Mission of the National Park Service**

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship**: We share a commitment to resource stewardship with the global preservation community.
- **Excellence**: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- Integrity: We deal honestly and fairly with the public and one another.
- Tradition: We are proud of it; we learn from it; we are not bound by it.
- **Respect**: We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

### Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park's purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Fort Matanzas National Monument can be accessed online at: http://insideparkatlas.nps.gov/.



# Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

### **Brief Description of the Park**

Fort Matanzas National Monument is 14 miles south of St. Augustine, on the northeast Atlantic coast of Florida. Fort Matanzas National Monument was established by presidential proclamation on October 15, 1924. The U.S. War Department administered the fort until it was transferred to the Department of the Interior, National Park Service in 1933. Additional acreage was added to the park in 1948, and subsequent donations by the Johnson family during the 1960s expanded the park by about 70 acres. The various land expansions that followed resulted in the inclusion of significant natural resources within the park boundaries. These resources include a variety of natural habitats that support diverse plant and animal communities typical of the Northeast Florida coastal barrier ecosystems. The park encompasses approximately 300 acres, divided between the southern tip of Anastasia Island (approximately 110 acres) and the northern end of Rattlesnake Island (approximately 190 acres).

The history of Fort Matanzas is closely linked with St. Augustine and the Castillo de San Marcos, which served as the city's chief defensive structure for many years. Since St. Augustine's founding in 1565, the outpost town had been the heart of Spain's coastal defense system in Florida. After the completion of the Castillo in 1695, the town still had a glaring weakness—the Matanzas Inlet. The inlet allowed easy access to the Matanzas River, by which enemy vessels could attack St. Augustine. In 1740, troops from the British colony of Georgia blockaded the St. Augustine Inlet and began a 39-day siege of the town. The British eventually retreated and the Spanish immediately sought to fortify Matanzas Inlet, realizing that British control of this strategic entry to the river could ultimately lead to the surrender of the town.





Construction of a masonry fort began soon thereafter. In 1742, with the fort near completion, the British positioned 12 ships near the inlet. The fort's cannons were able to drive off the British scouting boats and the ships. Besides warning St. Augustine of enemy vessels, the fort also served as a rest stop, coast guard station, and a place where vessels heading for St. Augustine could get advice on navigating the river. Its primary mission, though, was maintaining control of the Matanzas Inlet, which it did successfully throughout the fort's military life. This control prevented the enemy from easily accessing the southern approach to St. Augustine.

Today, more than 568,500 people visit the park annually, and of those, about 65,000 people visit the fort. Visitors to Fort Matanzas National Monument can experience exhibits on the fort's history and explore the fort via regular NPS-led boat trips to the fort, which is supported by ranger talks and occasional historic weapons firing demonstrations. The park visitor center is on Anastasia Island, a barrier island separated from the Florida mainland by the Matanzas River and the Intracoastal Waterway. Because the authorized boundary of the park extends only to the mean high tide line on both Anastasia and Rattlesnake Islands, neither the waters of the Matanzas River, the Intracoastal Waterway, nor the Atlantic Ocean are part of the national monument.

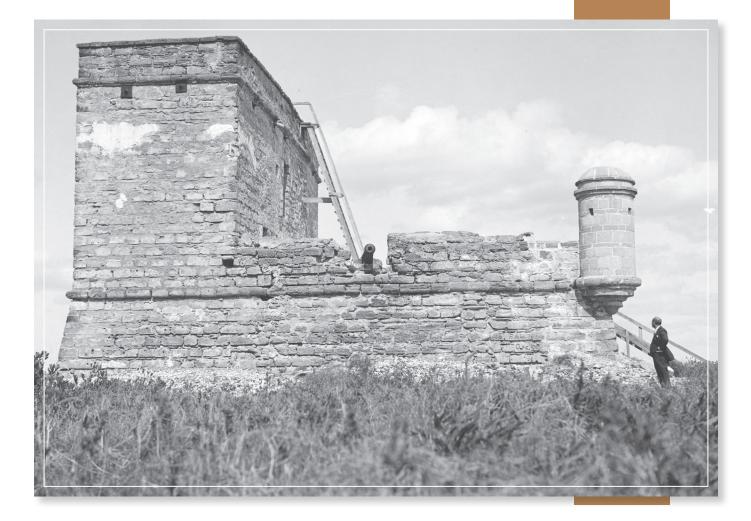
The Matanzas Inlet that separates Anastasia Island from Rattlesnake Island, where the fort stands, is one of the last natural inlets (i.e., with no dredged channel) on the east coast of Florida and is unsuitable for navigation, except by small craft. Predominant habitats in Anastasia Island include beaches along both the Matanzas River and the Atlantic shore, stabilized sand dunes supporting maritime forest, secondary dunes further inland, and salt marsh. Rattlesnake Island supports slash pine and red bay woodlands, oyster shell beaches, and developing hardwood forests typified by wax myrtle, cedar, and cabbage palm.

In addition to visiting the fort, the park offers a variety of recreational activities, including bird watching, boating, fishing, kayaking, nature walks, swimming, and wildlife viewing. The park offers a 0.5-mile self-guided nature trail on a boardwalk through a coastal maritime forest and through the dunes to a beach overlook. The majority of the land on Rattlesnake Island is open to the public, with the exception of the area immediately surrounding the fort. Although most of the parkland on Anastasia Island is closed to the public because of the dunes and their sensitive environment, the beach areas are open to the public and receive the vast majority of the park's visitors, who enjoy traditional beach activities such as picnicking, boating, shelling, wading/swimming, and sunbathing.

### **Park Purpose**

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Fort Matanzas National Monument was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was designated on October 15, 1924, through Presidential Proclamation No. 1713 (see appendix A for presidential proclamation and subsequent legislation). The purpose statement lays the foundation for understanding what is most important about the park.

FORT MATANZAS NATIONAL MONUMENT preserves the fortified watchtower, completed in 1742, which defended the southern approach to the Spanish military settlement of St. Augustine, and protects approximately 300 acres of Florida coastal environment.

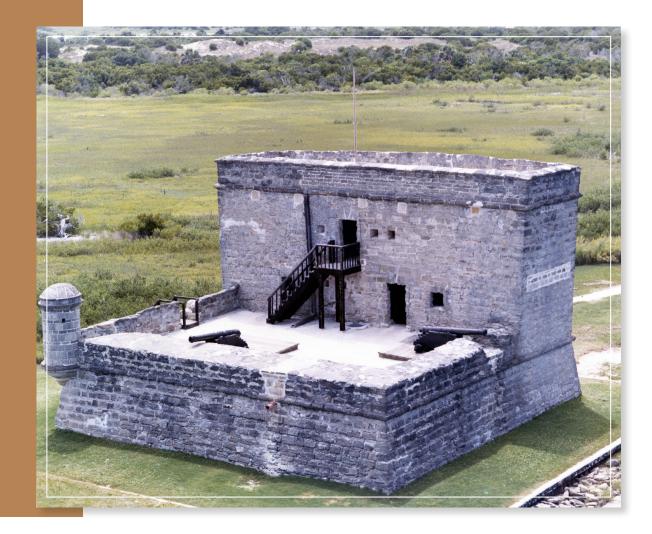


### **Park Significance**

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Fort Matanzas National Monument, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Fort Matanzas National Monument. (Please note that the sequence of the statements does not reflect the level of significance.)

- Built from coquina, a locally quarried form of limestone, Fort Matanzas is the only example of a Spanish fortified watchtower in the continental United States.
- Fort Matanzas is the best-preserved component of the Spanish outer defense system that once protected St. Augustine.
- Fort Matanzas' setting provides a rare opportunity for visitors to experience the natural landscape as it might have appeared to an 18th-century Spanish soldier.
- Fort Matanzas National Monument preserves an undeveloped portion of an Atlantic barrier island and coastal ecosystem containing dunes, marsh, maritime forest, and associated flora and fauna, including threatened and endangered species.





### **Fundamental Resources and Values**

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Fort Matanzas National Monument:

- Fort Matanzas. Fort Matanzas is a coquina masonry Spanish fortification that guards the southern mouth of the Matanzas River, the Matanzas Inlet. The fort protected the "back door" entrance to the city of St. Augustine, a weak spot in the city defense, and also served as a rest stop, coast guard station, and a place where vessels heading for St. Augustine could get advice on navigating the river. Located on Rattlesnake Island, the fort was completed in 1742, although there were successive watchtowers at the Matanzas Inlet from 1569 until 1740. Fort Matanzas is a rare surviving example of Spanish fortification as erected in Florida in the 18th century. The fort includes an elevated gun deck, officer's quarters, soldiers' quarters, powder magazine, and a 30-foot high observation deck. The structure is a tangible symbol of Spanish culture and heritage in the area.
- **Historic Setting and Natural Environment.** The natural landscape surrounding the fort retains a high degree of natural integrity encompassing broad, sweeping views extending out from the fort, providing an authentic experience to visitors in terms of the strategic location and remoteness of the fort. Supporting the historic setting and viewshed is approximately 300 acres of undeveloped Atlantic barrier island and coastal ecosystem that are protected by Fort Matanzas National Monument. Natural coastal processes in the park, such as erosion, shoreline migration, deposition, and inlet formation, are allowed to continue without interference.

### **Other Important Resources and Values**

Fort Matanzas National Monument contains other resources and values that are not fundamental to the purpose of the park and may be unrelated to its significance, but are important to consider in planning processes. These are referred to as "other important resources and values" (OIRV). These resources and values have been selected because they are important in the operation and management of the park and warrant special consideration in park planning.

The following other important resources and values have been identified for Fort Matanzas National Monument:

- **Cast Iron Cannons.** Five cannons once guarded the fortress, facing in the three approaching directions. Each cannon could easily reach the inlet, then only a half-mile away. Two of these original cannons still stand at the fort today. They were made around 1750 (probably in Spain), emplaced at Matanzas in 1793, and left behind by the Spanish when they departed Florida in 1821. The other two cannons, now on the gun deck, are modern reproductions purchased through donations to the park and used in the park's living history cannon firing demonstrations.
  - **Archeology.** Fort Matanzas National Monument has seven archeological sites that are listed in the National Register of Historic Places. These resources are primarily shell middens and sites associated with Spanish and British periods of occupation. The historic and aboriginal middens on Rattlesnake and Anastasia Islands have provided, and will continue to provide, information useful for interpretation to the public.



## **Interpretive Themes**

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Fort Matanzas National Monument:

- **Protecting a Strategic Location.** Fort Matanzas stands as a reminder of the importance of guarding the Matanzas Inlet, which had been the backdoor, southern water approach to St. Augustine and the Spanish fortress Castillo de San Marcos.
- The Soldier Experience. The then-isolated location of Fort Matanzas took soldiers away from home, family, and the conveniences of community life in St. Augustine. Today, a relatively undeveloped natural landscape is evocative of the remote experiences of the Spanish soldiers charged with keeping a vigilant watch in defense of their way of life and of a key post of the Spanish Empire.
- Natural Connections. Through the conservation of portions of the Atlantic coastal barrier island ecosystems of Rattlesnake and Anastasia Islands, Fort Matanzas National Monument serves as a gateway to the natural world, through recreation, exploration, understanding, and stewardship of the natural resources that comprise this native ecosystem.
- **Preservation and Stewardship.** The stewardship of this nearly 300-year-old fortified Spanish watchtower requires careful preservation methods and traditional masonry techniques to maintain and safeguard Fort Matanzas for the purpose of providing an authentic place for reflecting on our nation's past.
- **St. Augustine and American Beginnings.** Fort Matanzas National Monument provides an opportunity for personal reflection on the beginnings of St. Augustine and the country. Whether a view reminiscent of the undeveloped landscape first experienced by native peoples, the clash of nations between the French and Spanish in 1565, or Spain's struggle to protect its strategic port from British control in the 1740s, this special place represents the early period of what would become the United States of America.



### Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental and other important resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

### **Special Mandates and Administrative Commitments**

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Fort Matanzas National Monument.

Fort Matanzas National Monument has no special mandates. For more information about the park's administrative commitments, please see appendix B.

### **Assessment of Planning and Data Needs**

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental and other important resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

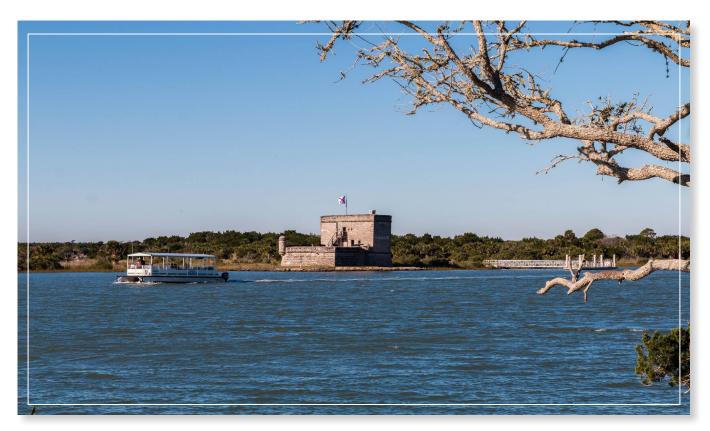
There are three sections in the assessment of planning and data needs:

- 1. analysis of fundamental and other important resources and values
- 2. identification of key issues and associated planning and data needs
- 3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental and other important resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

#### **Analysis of Fundamental Resources and Values**

The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.



Fundamental Resource or Value	Fort Matanzas				
Related Significance Statements	<ul> <li>Built from coquina, a locally quarried form of limestone, Fort Matanzas is the only example of a Spanish fortified watchtower in the continental United States.</li> <li>Fort Matanzas is the best-preserved component of the Spanish outer defense system that once protected St. Augustine.</li> </ul>				
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Major efforts were made to stabilize and restore the fort in 1916, 1922, the 1930s, and the late 1970s. Presently, the fort is in good condition.</li> <li>There is no after-hour security for the fort.</li> <li>There is a visitor center / headquarters on Anastasia Island where ferry passes are issued.</li> <li>The number of visitors at any one time is controlled by boat capacity.</li> <li>A ranger-led experience is included as part of the visit to the fort.</li> <li>An 8-minute movie is shown on request at the visitor center outlining the history of the fort.</li> <li>The ferry boat to the fort and the fort itself are not accessible. There is a stair of 15 steps to get up to the fort.</li> <li>There is a coquina seawall along the northeast side of the fort, currently covered by a coquina revetment.</li> <li>The coquina seawall and portions of Rattlesnake Island are flooded several times annually due to high tides in the spring and fall.</li> <li>Trends</li> <li>Increasing visitation and associated foot traffic.</li> <li>Expansion of natural resources interpretation.</li> <li>The number of visitors per year at Fort Matanzas has been steadily increasing. The most visited areas today are the beach sites.</li> </ul>				

Fundamental Resource or Value	Fort Matanzas				
Threats and Opportunities	<ul> <li>Threats</li> <li>Shifting shoreline due to coastal erosion poses a threat to the integrity and foundation of the historic watchtower.</li> <li>Climate change / sea level rise.</li> <li>Shifting ground, wash over.</li> <li>Unauthorized access/uses.</li> <li>Future increases in sea level, possibly combined with changes to storm frequency and magnitude, will probably result in increased erosion and flooding of the coquina seawall and portions of Rattlesnake Island.</li> <li>Increase visitation may negatively impact the coquina material of the structure, ranging from wear and tear of the floors to visitors touching the coquina walls.</li> <li>Human impacts from visitation and use (i.e., wear and tear).</li> <li>Vegetation growing on fort.</li> <li>Opportunities <ul> <li>Increase natural resources interpretation at Fort Matanzas.</li> <li>Enhancement of overall visitor experience.</li> <li>Structure monitoring through gap/crack measuring.</li> <li>Maintenance projects for floors, coquina replacement, and repointing.</li> <li>Expand interpretive programming to include the surrounding areas (by the visitor center, across the river by the beach, etc.).</li> <li>Improve restoration of parts of the structure (correct mistakes from the past).</li> <li>Photo monitoring of the structure.</li> <li>Creating programs with accessibility in mind (also beach access).</li> <li>Creating materials and programs in Spanish.</li> </ul> </li> </ul>				
Data and/or GIS Needs	<ul> <li>Climate change vulnerability assessment.</li> <li>Coastal geomorphology modeling.</li> <li>Cultural landscape inventory.</li> <li>Ethnographic overview and assessment.</li> <li>Preservation guide for Fort Matanzas.</li> <li>Visitor use study.</li> <li>Climate data and information.</li> </ul>				
Planning Needs	<ul> <li>Accessibility plan.</li> <li>Climate change adaptation plan.</li> <li>Comprehensive interpretive plan / long-range interpretive plan.</li> <li>Cultural landscape report.</li> <li>Historic structure report to include specific treatment plan (update).</li> <li>Visitor use management plan.</li> <li>Resource stewardship strategy.</li> </ul>				

Fundamental Resource or Value	Fort Matanzas
	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>Archeological and Historic Preservation Act of 1974</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Americans with Disabilities Act of 1990</li> <li>Historic Sites Act of 1935</li> <li>National Historic Preservation Act of 1966, as amended</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 11988, "Floodplain Management"</li> <li>"Protection of Historic Properties" (36 CFR 800)</li> <li>"Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79)</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>NPS Management Policies 2006 (chapter 7) "Interpretation and Education"</li> <li>NPS Management Policies 2006 (chapter 7) "Commercial Visitor Services"</li> <li>Director's Order 24: NPS Museum Collections Management</li> <li>Director's Order 28: Cultural Resource Management</li> <li>Director's Order 28: Archeology</li> <li>Director's Order 28: Archeology</li> <li>Director's Order 28: Archeology</li> <li>Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services</li> <li>NPS Manseum Handbook, parts I, II, and III</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> </ul>

Fundamental Resource or Value	Historic Setting and Natural Environment						
Related Significance Statements	<ul> <li>Fort Matanzas' setting provides a rare opportunity for visitors to experience the natural landscape as it might have appeared to an 18th-century Spanish soldier.</li> <li>Fort Matanzas National Monument preserves an undeveloped portion of an Atlantic barrier island and coastal ecosystem containing dunes, marsh, maritime forest, and associated flora and fauna, including threatened and endangered species.</li> </ul>						
Current Conditions and Trends	<ul> <li>Conditions <ul> <li>Overall natural conditions are fair to good.</li> <li>The historic setting is good and provides a sense of isolation at the fort (no electricity, etc.).</li> <li>Most of the ocean and Matanzas River shoreline along the island is undeveloped, with only a few coastal structures near the visitor center.</li> <li>Predominant habitats in the Anastasia Island portion of the park include beaches along both the Matanzas River and the Atlantic shore, stabilized sand dunes supporting maritime forest, secondary dunes further inland, and salt marsh.</li> <li>Fort Matanzas National Monument protects approximately 300 acres of dunes, marsh, and maritime forest within a nearly undisturbed barrier island system.</li> <li>Fort Matanzas serves as habitat, nesting, or feeding grounds for a variety of threatened or endangered species. This includes habitat for the extremely limited-ranged and endangered Anastasia Island beach mouse.</li> <li>Fort Matanzas is part of the Guana Tolomato Matanzas National Estuarine Research Reserve. This reserve contains approximately 55,000 acres of county, state, and federal lands, providing protection for salt marsh and mangrove tidal wetlands, oyster bars, estuarine lagoons, upland habitat, and offshore seas.</li> <li>Data are being gathered on a three-year cycle for fire and fuel dynamics. There have been small fires at the park, but minor in scale in that they have petered out before becoming of concern.</li> <li>Fort Matanzas shows a prominence of natural sounds, a critical component of the historic and coastal setting, visitor experience, and plays an important role in wildlife communication, behavior, and other ecological processes. The average existing sound level (with the influence of man-made sounds) is predicted to be 0.7 dBA above the natural ambient sound level. Compared to parks throughout the national park system, this is a low number.</li> <li>Fort Matanzas provides important coastal habitat for necturnal wildlife and a unique opportunity for the public</li></ul></li></ul>						

Fundamental Resource or Value	Historic Setting and Natural Environment				
Threats and Opportunities	<ul> <li>Threats</li> <li>Sea-level rise (climate change), which may lead to salt water inundation in the marsh, geomorphological changes in the dunes and ocean beach during storm surge, and substrata and vegetation change as the sand budget shifts across the barrier island and the marsh.</li> <li>The dock next to the fort on Rattlesnake Island could be under potential threat during storm surge and as geomorphology changes in the dunes, potentially limiting visitor access.</li> <li>Increasing visitation, impact on natural resources with increasing use and foot traffic.</li> <li>There is not enough parking available on peak visitation days; overuse of the area and illegal parking cause damage to vegetation, park infrastructure such as pavement edges, and minor soil erosion. Pedestrian safety is also compromised as a result.</li> <li>Boat traffic creates a minimal impact on soundscape and a greater impact through wave action and safety. The waterways can become congested in the summer on weekend days.</li> <li>Trespass vehicles (off-road) impact vegetation, dunes, etc.</li> <li>Increasing construction outside of the park boundary impacts the viewshed.</li> <li>Wildfire risk increases with increasing visitation.</li> <li>Encroachment of human population and development is the most important threat or stressor the park must consider. Development may lead to increasing point and nonpoint source pollution, affecting air and water quality. Increased vehicle emissions can occur as more people move to the area. In-park biological integrity may also be stressed from these outside influences.</li> <li>Potential increase in noise from nearby development, transportation, and aircraft.</li> <li>Potential increase in artificial light from nearby development, light domes from bright towns/cities.</li> <li>At night, air pollution scatters artificial light, increasing the effect of light pollution on the night sky.</li> <li>Coal-fired power plants and vehicle exhaust are believed to be major contributors to air quality impacts i</li></ul>				

Fundamental Resource or Value	Historic Setting and Natural Environment					
Threats and Opportunities	<ul> <li>Opportunities <ul> <li>Park expansion to county and/or conservation easement property.</li> <li>Visitor center expansion.</li> <li>Enhancement of overall visitor experience.</li> <li>Expand interpretative and educational tools to communicate the connections between historic views, natural environment, sensitive park resources (forest, wetland, wildlife, water quality, Fort Matanzas, cast iron cannons), air quality/pollution, human health, climate change, and other associated resources.</li> <li>Natural resource interpretation.</li> <li>Boat-based interpretation.</li> <li>Focus structured development, nonnative species, and other natural resources education campaigns on low population centers with a high potential for growth.</li> <li>Develop acoustic goals, indicators, and standards in related park plans.</li> <li>Manage lighting at the park in order to achieve fully sustainable outdoor lighting; this includes lighting only when and where it is needed, shielding lights and directing them downward, and using warm colors rather than white or blue.</li> <li>Work cooperatively with other federal and state air quality agencies and local stakeholders to reduce air quality impacts in the park from sources of air pollution. Partnering with potential nearby developers or planners could similarly help increase awareness about the importance of park historic viewsheds, air quality, and night sky.</li> <li>Improve park sustainability and environmental leadership through the Climate Friendly Park certification including an environmental management system (Director's Order 13A: Environmental Management Systems).</li> </ul> </li> </ul>					
Data and/or GIS Needs	<ul> <li>All taxa-biodiversity inventory.</li> <li>Coastal geomorphology modeling.</li> <li>Detailed, large-scale vegetation maps are in production with an anticipated completion date of fall 2016.</li> <li>Baseline acoustic data.</li> <li>Baseline night skies data.</li> <li>Visitor use study.</li> <li>Climate data and information.</li> <li>Pollution studies.</li> <li>Air quality monitoring data.</li> <li>Visual resource inventory.</li> </ul>					
Planning Needs	<ul> <li>Cultural landscape report.</li> <li>Lighting plan.</li> <li>Fire management plan.</li> <li>Resource stewardship strategy.</li> <li>Comprehensive interpretive plan / long-range interpretive plan.</li> <li>Climate change adaptation plan.</li> <li>Visual resource management plan.</li> </ul>					

Fundamental Resource or Value	Historic Setting and Natural Environment					
	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>Clean Air Act of 1977 (42 USC 7401 et seq.)</li> <li>National Environmental Policy Act of 1969</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 11988, "Floodplain Management"</li> <li>"Audio disturbances" (36 CFR 2.12)</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> </ul>					
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§1.4) "Park Management"</li> <li>NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries"</li> <li>NPS Management Policies 2006 (§3.1) "General"</li> <li>NPS Management Policies 2006 (chapter 4) "Natural Resource Management"</li> <li>NPS Management Policies 2006 (§5.3.1.7) "Cultural Soundscape Management"</li> <li>Director's Order 18: Wildland Fire Management</li> <li>NPS Reference Manual 18: Wildland Fire Management</li> <li>Interagency Burned Area Emergency Response Guidebook</li> <li>Director's Order 32: Cooperating Associations</li> <li>Director's Order 47: Soundscape Preservation and Noise Management</li> <li>NPS Natural Resources Inventory and Monitoring Guideline</li> <li>NPS Natural Resource Management Reference Manual 77</li> <li>Director's Order 77-1: Wetland Protection</li> <li>NPS Procedural Manual #77-1: Wetland Protection</li> <li>Director's Order 77-2: Floodplain Management</li> </ul>					



### Analysis of Other Important Resources and Values

Other Important Resource or Value	Cast Iron Cannons					
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Original, historic cannons are in fair condition for their age.</li> <li>Cannon have rusting and oxide jacking (expansion of material).</li> <li>For the replica guns, carriage metal is rusting/fused and guns have some surface rust.</li> <li>Trends</li> <li>Continued deterioration, with downward trend in condition over time.</li> </ul>					
Threats and Opportunities	<ul> <li>Threats <ul> <li>Weather.</li> <li>Visitors sitting on cannon erodes paint finish.</li> </ul> </li> <li>Acidification caused by air pollution from coal-fired power plants, vehicle exhaust, and other sources, is probably causing damage to the cast iron cannon and other cultural resources, and may be increasing maintenance costs. While wet deposition (acid rain) contributes partly to the deterioration, sulfur dioxide gas from combustion is the main contributor to deterioration of stone, paint, and some metals.</li> <li>Salt environment causes rust.</li> </ul> <li>Opportunities <ul> <li>Preventative maintenance planning</li> <li>Digital recording of cannon on fine scale.</li> <li>New technology uses for record keeping.</li> <li>Interpretive signs.</li> </ul> </li>					
Data and/or GIS Needs	Artillery documentation.					
Planning Needs	<ul> <li>Historic ordnance maintenance plan.</li> <li>Comprehensive interpretive plan / long-range interpretive plan.</li> <li>Resource stewardship strategy.</li> </ul>					
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	<ul> <li>Resource stewardship strategy.</li> <li>Laws, Executive Orders, and Regulations That Apply to the OIRV <ul> <li>Archeological and Historic Preservation Act of 1974</li> <li>Clean Air Act of 1977 (42 USC 7401 et seq.)</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Management of Museum Properties Act of 1955 (PL 84-127) (16 USC 18f through 18f-3)</li> <li>"Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79)</li> <li>"Protection of Historic Properties" (36 CFR 800)</li> </ul> </li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§4.7) "Air Resource Management "</li> <li>NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>NPS Museum Handbook, parts I, II, and III</li> <li>Director's Order 28: Cultural Resource Management</li> <li>Director's Order 28: Archeology</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> </ul>					

Other Important Resource or Value	Archeology					
Current Conditions and Trends	<ul> <li>Conditions</li> <li>The park's archeological collection is in good condition, as are the site conditions, as reported in the Archeological Site Management Information System.</li> <li>The condition of underground archeology is not known.</li> <li>Vast majority of the archeological sites have not been investigated.</li> <li>There is a regional archeological survey plan completed.</li> <li>Several archeological surveys and investigations have taken place at Fort Matanzas sinct the 1960s. These surveys have provided comprehensive coverage of the park and sugg that there is a low potential for finding additional sites on land.</li> <li>There are seven recorded archeological sites at the park.</li> <li>An underwater archeological survey of the river east of Fort Matanzas, conducted in 1979, did not identify any submerged cultural resources but suggested that intact resources could be present under overburden.</li> <li>Approximately 40,085 archeological specimens have been collected through excavatior at Fort Matanzas and Castillo de San Marcos National Monument, with historic ceramic representing the majority of the objects.</li> <li>Some of these archeological specimens are on loan to the NPS Southeast Archeological Center in Tallahassee, Florida, for analysis, study, and cataloging. The remainder of the park's museum collections is stored at the Timucuan Ecological and Historical Preserve museum management facility in Jacksonville, Florida.</li> <li>There is increasing public interest in archeology through articles on metal detection (thi topic comes up regularly at the park).</li> <li>Erosion is increasing.</li> <li>Water is destroying archeological sites.</li> <li>Looting and illegal collection is affecting sites.</li> <li>National Park Service is actively protecting sites and following section 106 protocols as written in the National Historic Preservation Act.</li> </ul>					
Threats and Opportunities	<ul> <li>Threats</li> <li>Use of metal detectors around the fort may lead to the disruption and looting of archaeological sites.</li> <li>Construction and other ground-disturbing activities in the park.</li> <li>Shifting shorelines due to coastal erosion leading to the erosion of archeological sites.</li> <li>Encroachment of river on midden.</li> <li>People trampling or looting sites.</li> <li>Disruption of potential historical resources from seekers of slaughter site.</li> <li>Climate change may impact archeological sites in Fort Matanzas if more erosion occurs because of increased storm frequency and intensity or sea level rise.</li> <li>As archeological and historic resources become submerged or compromised because of climate change, they become unavailable for archeological research, artifact recovery, and visitor enjoyment.</li> <li>Opportunities <ul> <li>Remote sensing could reveal more information.</li> <li>Future technology uses, ground-penetrating radar.</li> <li>Partnering with local archeologists and clubs.</li> <li>Interpretive programming with archeology focus.</li> <li>Completing formal, comprehensive archeological survey of the park.</li> </ul> </li> </ul>					

Other Important Resource or Value	Archeology				
Data and/or GIS Needs	<ul><li>Archeological overview and assessment.</li><li>Remote sensing.</li><li>Comprehensive archeological inventory.</li></ul>				
Planning Needs	<ul> <li>Comprehensive interpretive plan / long-range interpretive plan.</li> <li>Resource stewardship strategy.</li> <li>Climate change adaptation plan.</li> </ul>				
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the OIRV</li> <li>Archeological and Historic Preservation Act of 1974</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Historic Sites Act of 1935</li> <li>Management of Museum Properties Act of 1955 (PL 84-127)</li> <li>National Historic Preservation Act of 1966, as amended</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>"Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79)</li> <li>"Protection of Historic Properties" (36 CFR 800)</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§4.1) "General Management Concepts"</li> <li>NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>NPS Management Policies 2006 (chapter 7) "Interpretation and Education"</li> <li>NPS Museum Handbook, parts I, II, and III</li> <li>Director's Order 24: NPS Museum Collections Management</li> <li>Director's Order 28: Cultural Resource Management</li> <li>Director's Order 28: Archeology</li> </ul>				





### Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental and other important resources and values. For example, a key issue may pertain to the potential for a fundamental or other important resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but which still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Fort Matanzas National Monument and the associated planning and data needs to address them:

• Historic Preservation of the Historic Structure. The original fort structure was completed in 1742 with repairs in 1916, 1924, 1935, and major work done in 1980. Some of the repairs were incompatible, and there has been an overall lack of preservation. There is not currently any work being completed to preserve the fort. The fort is experiencing increased deterioration because of weather, erosion, increased visitation, and the lack of a plan with short- and long-term goals. There is not a comprehensive understanding of how to continue to maintain the structure in its present condition without continued deterioration. A proactive plan, in collaboration with a state historic preservation officer representative, would help determine next steps and improve preservation work.

#### Associated Planning Needs:

- Historic structure report (update) with a specific treatment plan
- Resource stewardship strategy
- Cultural landscape report

#### Associated Data Needs:

- Preservation guide for Fort Matanzas
- Cultural landscape inventory
- Vulnerability to the Effects of Climate Change. Sea level is projected to increase more than 0.5 feet by 2050 and more than 2 feet by 2100 for the region due to climate change. Increases in storm frequency and intensity are also projected as mean annual temperature increases (+2.5 to 3.6°F by 2050; +3.6 to 6.7°F by 2100). Increases in sea level and storm intensity may lead to loss of land and critical sand dune habitat for threatened and endangered species, increase erosion and/or accretion across the coastline, with the potential loss of nearby freshwater ecosystems due to salt water intrusion as sea level rises. Under certain storm conditions, the incoming tide breaches the sea wall and reaches the fort. Increasing sea levels and increasing frequency of storms could cause structural damage to the fort. These conditions could also lead to increased erosion of the sand dune habitat where threatened and endangered species are living. The NPS Southeast Coast Inventory Monitoring Network actively monitors saltmarsh elevation change in response to sea level rise.

#### Associated Planning Needs:

- Climate change adaptation plan

#### Associated Data Needs:

- Climate data and information
- Climate change vulnerability assessment

**Visitor Experience.** The park needs to address staffing and programming issues to improve the visitor experience and mitigate the human-caused impacts on resources, the fort, and other visitors' experiences. Visitor congestion and an inadequate visitor center are impacting the number of people able to experience Fort Matanzas. The park turns away many visitors because of full parking lots, while illegal parking is currently an issue on both sides of the road leading to the park entrance. There are about 36 parking spaces at the visitor center because the spaces in the dirt parking lot are not lined. Approximately 568,500 people are visiting the park annually, and more than 90% of staff time is spent serving the approximately 65,000 who visit the fort itself. Boat tickets sell out early in the afternoon and do not meet the peak demand. Additional information to understand these capacity and operational issues and subsequent planning to address them would greatly enhance the visitor experience at the fort.

There are also accessibility challenges with the dock system and fort itself. Adaptations by the park include assisting people onto and off of the ferry and providing interpretive services on the ground level at the fort before allowing the group access to the fort. This allows those that cannot traverse the stairs up to the fort to better understand the fort and its purpose without actually entering the structure. The park also designed an interpretive program using iPads for those with accessibility challenges. This provides photos and interpretive text for people who cannot enter the structure. An accessibility plan would identify additional opportunities for improvement in the programs and services offered by a park, as well as the park facilities and amenities.

#### Associated Planning Needs:

- Visitor use management plan
- Comprehensive interpretive plan / long-range interpretive plan
- Accessibility plan

Associated Data Needs:

- Visitor use study



**Ferry Access to the Fort.** The waterway is changing due to sand accumulations and silting that have been ongoing for the last few years. At low tide, the ferry has to navigate around a sand bar to cross the river to the fort. Park staff has continued concerns as the sandbar grows and the route adapts to changes. A shift in river dynamics will also have impacts elsewhere, such as an increase in erosion and changes in tidal flow at the visitor center dock.

#### Associated Planning Needs:

- Visitor use management plan
- Climate change adaptation plan

#### Associated Data Needs:

- Coastal geomorphology modeling
- Climate data and information

**Resource Protection.** Fort Matanzas National Monument faces operational issues, such as, trash, illegal driving, illegal camping, and other inappropriate activities, that can have a negative impact on the preservation of historic resources. Park facilities and resources, both cultural and natural, receive high visitation and, when coupled with the minimal size of the park and scope of the resources, create measurable negative impacts. Modern park facilities experience high volume use beyond their original design specifications. Cultural resources, which include the fort and prehistoric and historic archeological middens, all experience direct and indirect impacts because of the high volume of visitors. Natural resources, including tidal salt marshes, beach, coastal sand dunes, and river shoreline, experience similar impacts. Other impacts include climate change not related to visitor use. See the current law enforcement needs assessment for specific details.

#### Associated Planning Needs:

- Visitor use management plan
- Resource stewardship strategy
- Climate change adaptation plan

#### Associated Data Needs:

- Visitor use study
- Climate data and information

#### **Planning and Data Needs**

To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform park management efforts to secure funding and support for planning projects.

	Planning Needs – Where A Decision-making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Needs	Priority (H, M, L)	Notes	
Key Issue and FRV	Historic structure report (update) with a specific treatment plan	High	The park's historic structure report for the fort needs to be updated to guide its management and stewardship. The report would include a treatment plan with a long-term, prescriptive preservation guide for this historic structure.	
Key Issue and FRV	Resource stewardship strategy	High	This strategy would guide park resource stewardship by outlining strategies for improving resource-related conditions and documentation.	
Key Issue and FRV	Visitor use management plan	High	This plan would develop a collaborative vision for providing and managing visitor use in the park. It would include long-term strategies for providing access, an analysis of the appropriate carrying capacity of Fort Matanzas (the fort itself), connecting visitors to key park experiences, and the best practices for managing visitor use to protect the park's fundamental resources.	
Key Issue, FRV, and OIRV	Climate change adaptation plan	Medium	Understanding what climate futures are plausible for the region along with climate change vulnerability assessments on select fundamental resources would inform climate change considerations in park planning and adaptive management decisions. The NPS Climate Change Response Program can assist the park through these processes, as needed.	
Key Issue and FRV	Comprehensive interpretive plan / long-range interpretive plan	Medium	This plan is the basic planning component for interpretation and education in a park. It is a tool to help parks decide priorities for their objectives, determine what stories to tell, identify their audiences, and describe the most effective mix of media and personal services to use. It would include a long-range interpretive plan, annual interpretive plan, and an interpretive database.	
FRV	Fire management plan	Medium	A fire management plan is required for all parks that have vegetation that could sustain fire. The fire management plan is a public document (requires a public comment period).	
OIRV	Historic ordnance maintenance plan	Medium	This plan would be a combined planning effort with Castillo de San Marcos National Monument. The plan would include a condition assessment of cannons and evaluation of iron conditions.	
Key Issue and FRV	Accessibility plan	Low	This plan would address accessibility for visitors with disabilities. Some of the accessibility needs in interpretive programing would be addressed in the visitor use management plan, moving forward with accessibility at Fort Matanzas on the ferry and the site of the fort. The plan would consider expanding definition of accessible to include virtual signs and interpretation to variety of visitors.	
Key Issue and FRV	Cultural landscape report	Low	A cultural landscape report is the primary guide to treatment and use of a cultural landscape. Based on the historic context provided in a historic resource study, the report documents the characteristics features, materials, and qualities that make a landscape eligible for the National Register of Historic Places.	
FRV	Lighting plan	Low	A lighting plan that includes fully sustainable lighting would help the park manage the local lightscape at the park, reduce glare that can affect visitors and staff, and reduce impacts on wildlife.	
FRV	Visual resource plan	Low	Based on the visual resource inventory, the plan would identify scenic conservation goals and strategies to protect the historic setting.	



Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes	
Key Issue and FRV	Climate change vulnerability assessment	High	Vulnerability assessments of park natural and cultural resources would look at select resources to evaluate potential impacts on the resource from climate change (e.g., sea level rise and increased storm frequency and intensity) and a resource's ability to adapt to these potential impacts. Storms are the primary drivers of change along the Atlantic coast. The National Park Service, in cooperation with various universities and government agencies, is undertaking a series of investigations to assess the vulnerability of natural and cultural resources to storms and sea level rise in coastal parks. These projects would allow managers to better understand the level of vulnerability, improve the park's pre-storm preparedness and post-storm response, and increase the safety of park visitors and employees.	
Key Issue and FRV	Climate data and information	High	Understanding observed and projected climate trends, including weather data (precipitation and storm events) and assessment of climate models (projected climate futures) for the region would better inform park planning and management decisions within the context of a changing climate. The NPS Climate Change Response Program can assist the park through these processes, as needed.	
Key Issue and FRV	Preservation guide for Fort Matanzas	High	This guide would provide long-term direction on maintenance and repair of historic structures and objects.	
Key Issue and FRV	Visitor use study	High	A visitor use study would identify visitor use patterns and carrying capacity of certain areas of the park to assist in the development of a visitor use management plan.	
OIRV	Archeological overview and assessment	Medium	This overview and assessment provides a baseline status report on park archeology, including the archeological collection and documentation/inventory, and makes recommendations for the future management actions.	
FRV	All taxa-biodiversity inventory	Medium	This inventory would encompass a condition assessment of all vertebrates and higher plants. This process could begin with a one-day BioBlitz and contribute data to an all taxa-biodiversity inventory, which involves a long-term targeted attempt to document all biological species living in a defined area. This information would inform a resource stewardship strategy and support the management of the natural setting of the park.	

Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes	
Key Issue and FRV	Coastal geomorphology modeling	Medium	These data would inform how changes to the Matanzas Inlet riverbed do, or could, impact ferry access to the fort. Florida Inland Navigation District may be a resource, as their mission is to perform the functions of the local sponsor of the Atlantic Intracoastal Waterway project in Florida, a state/federal navigation project. This organization would therefore aid the park should the need arise to perform dredging operations within the Matanzas River along the route travelled by the park's ferries.	
Key Issue and FRV	Cultural landscape inventory	Medium	This is a comprehensive inventory of cultural landscape features that have historical significance to the park.	
OIRV	Artillery documentation	Low	The artillery would be documented in fine detail, using photography, details of bronze engravings), and fine-detail scanning. The Outreach/Cannon of the Month volunteer could assist in these efforts.	
FRV	Comprehensive archeological inventory	Low	This inventory would address all areas of the park not already inventoried, in compliance of National Historic Preservation Act, section 110. It would follow the completion of the archeological overview and assessment.	
FRV	Detailed, large-scale vegetation maps	Low	With a current vegetation map, the park could more thoroughly assess the role of fire in the vegetation communities. These large-scale vegetation maps are currently in production with an anticipated completion date of fall 2016.	
Key Issue and FRV	Ethnographic overview and assessment	Low	This is a comprehensive background study that reviews existing information on park resources traditionally valued by stakeholders. This study also documents the need for further research on cultural affiliations, important events and associated places in the park, and traditional uses and ways of life.	
OIRV	Remote sensing	Low	Remote sensing, such as ground penetrating radar, would assist in the identification of underground resources, including archeological resources.	
FRV	Baseline night skies data	Low	Night skies data give the park a quantitative measure and baseline data of the amount of light pollution surrounding Fort Matanzas.	
FRV	Baseline acoustic data	Low	Acoustic data would allow NPS staff to better understand how much noise pollution is present in the preserved park environment above normal, ambient levels. It would create baseline data for future research and comparisons.	
FRV	Air quality monitoring data	Low	Ongoing regional air quality monitoring for visibility, ozone, and atmospheric deposition.	
FRV	Visual resource inventory	Low	To develop baseline visual resource information. The inventory would identify scenic quality and NPS/visitor values for the existing historic setting and serve as the baseline information for the visual resource management plan.	
FRV	Pollution studies	Low	Special studies to examine pollution dose-response relationships in sensitive park ecosystems, including the potential impact of mercury and other toxics on biota in the park, including birds and insects.	

# Part 3: Contributors

### Castillo De San Marcos National Monument and Fort Matanzas National Monument

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## **Appendixes**

### Appendix A: Enabling Legislation and Legislative Acts for Fort Matanzas National Monument

### Summary of Legislative History of Fort Matanzas National Monument

President Calvin Coolidge established Fort Matanzas as a national monument by proclamation on October 15, 1924, under the authority of section 2 of the Antiquities Act of 1906. The proclamation declared "An area of one acre comprising within it the site of the old fortification which is situated on a marsh island south of the main channel of the Matanzas River..." to be a national monument. That marsh island is now known as Rattlesnake Island.

President Franklin D. Roosevelt expanded Fort Matanzas National Monument through Proclamation Number 2114 on January 9, 1935. This proclamation added lands on Anastasia Island that had been donated to the United States by the Corbett family.

On March 24, 1948, President Harry S. Truman issued Proclamation Number 2773, which added the remainder of public lands on Rattlesnake Island, consisting of 89.42 acres, to the national monument "in order to insure permanent protection to the Fort and its historic setting."

Subsequent donations and the acquisition of 70 acres authorized by Public Law 106-524 (November 22, 2000) have further expanded the park from its original 1-acre size. Today, Fort Matanzas consists of nearly 300 acres on Rattlesnake and Anastasia Islands, some 14 miles south of the city of St. Augustine, Florida.

Executive Orders No. 6166 of June 10, 1933, and No. 6228 of July 28, 1933, (President Franklin D. Roosevelt) transferred Fort Matanzas (and other military parks, battlefields, and cemeteries) from the War Department to the Interior Department (National Park Service).

	A PROCLAMATION
National monu- ments. Preamble.	WHEREAS, there are various military reservations under the con- trol of the Secretary of War which comprise areas of historic and
Vol. 34, p. 225.	scientific interest; AND WHEREAS, by section 2 of the Act of Congress approved June 8, 1906 (34 Stat. 225) the President is authorized "in his dis- cretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the
Setting apart desig- nated historic forts as national monuments.	proper care and management of the objects to be protected"; NOW THEREFORE, I, Calvin Coolidge, President of the United States of America, under authority of the said Act of Congress do hereby declare and proclaim the hereinafter designated areas with the historic structures and objects thereto appertaining, and any
Fort Wood, N. Y.	other object or objects specifically designated, within the following military reservations to be national monuments: FORT WOOD, NEW YORK The site of the Statue of Liberty Enlightening the World, the foundations of which are built in the form of an eleven-pointed star
Castle Pinckney, S.C.	and clearly define the area comprising about two and one-half acres. CASTLE PINCKNEY, Charleston Harbor, South Carolina. The entire reservation, comprising three and one-half acres situated on Shutes Folly Island at the mouth of Cooper River opposite the southern extremity of the city of Charleston and about one mile
Fort Pulaski, Ga.	distant therefrom. FORT PULASKI, GEORGIA The entire area comprising the site of the old fortifications which are clearly defined by ditches and embankments, which inclose about
Fort Marion, Fla.	twenty acres. FORT MARION, FLORIDA The entire area comprising 18.09 acres situated in the city of Saint Augustine, Florida.
	<ul> <li>FORT MATANZAS, FLORIDA         An area of one acre comprising within it the site of the old fortification which is situated on a marsh island south of the present main channel of the Matanzas River in the southeast quarter of section 14, Township 9 South, Range 30 East, about 15 miles from the city of Saint Augustine, and about one mile from Matanzas Inlet.     </li> <li>IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.         Done at the city of Washington this fifteenth day of October, in the year of our Lord one thousand nine hundred and [SEAL.] twenty-four, and of the Independence of the United States of America the one hundred and forty-ninth.         CALVIN COOLIDGE         By the President:         JOSEPH C. GREW         Output         Description:         DOSEPH C. GREW         Description:         DOSEPH C. GREW         Description:         DOSEPH C. GREW         Description:         Description:</li></ul>

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

October 15, 1924.

Acting Secretary of State.

# Appendix B: Inventory of Administrative Commitments

Agreement Name	Type of Agreement	Start Date – Expiration Date	Notes
St. Johns County	Cooperative management agreement	2011– June 13, 2016	Beach toll collection, allows them to collect fees on NPS property.
Timucuan Ecological and Historic Preserve	General agreement	1999 – Ongoing	Partnership with park since 1999, and now formal agreement, to have Timucuan care for Castillo de San Marcos National Monument and Fort Matanzas National Monument museum collections.
Fort Mose and Florida Park Service	Memorandum of agreement	2014 – 2016	Agreement to help each agency to fulfill interpretive and training needs (2-year renewal).
St. Augustine Historical Society	Informal agreement	2015 – 2016	Informal agreement with St. Augustine Historical Society to store library materials and reference files and perform research when requested (annual renewal).
St. Johns County	Memorandum of agreement	2010 – 2015	Informal agreement with Dr. Woodward, county medical director, for EMT services at Castillo de San Marcos National Monument, also includes training (5-year renewal).
St. Johns County and City of St. Augustine	Memorandum of understanding	County: 2014 – 2016 City: 2013 – 2016	Dispatch agreements with both the county and the city to provide dispatch services (County: 2-year renewal; City: annual automatic renewal).
St. Johns County	Memorandum of understanding	Draft 2014 – Ongoing	Written law enforcement agreement with St. Johns County Sheriff's Office.
St. Johns County and City of St. Augustine	Memorandum of understanding	2014 – Ongoing	Reciprocal fire agreements for both the county and the city.
Fire Management Agreement – DOI and State of Florida	Memorandum of understanding	2014 – 2016	DOI-FL agreement to provide mutual aid in fire management.
Timucuan Ecological and Historic Preserve	Continuity of operations plan	2015 – 2016	COOP with Timucuan in case of emergency that they need to share location of operations (annual renewal).
Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR)	Memorandum of agreement	1998 – Ongoing	Informal agreement to transport GTMNERR for water quality testing. Investigate the existence or need for formal agreement.
Florida Fish and Wildlife Conservation Commission	Critical wildlife area designation	1988 – Ongoing	Understanding with the state that park will manage, for nesting shorebirds in the area, state listed species the Least Tern.
St. Johns River Water Management District	NA	NA – Expired	Inspection of adjacent property.

# Appendix C: Past and Ongoing Park Planning and Data Collection Efforts

Name	Туре	Published
Fort Matanzas National Monument Final General Management Plan and Environmental Impact Statement	Planning	2012
Fort Matanzas National Monument Long-Range Interpretive Plan	Planning	2002
Fort Matanzas National Monument Strategic Plan (Restricted Access)	Planning	1997
Fort Matanzas National Monument Statement for Management (Restricted Access)	Planning	1990
Fort Matanzas National Monument General Management Plan / Development Concept Plan / Environmental Assessment (Restricted Access)	Planning	1982
Interpretive Prospectus for Fort Matanzas National Monument	Planning	1974
Fort Matanzas National Monument Master Plan	Planning	1968
Castillo De San Marcos National Monument Master Plan Development Outline	Planning	1954
Air Quality		
Regional air quality monitoring for visibility, ozone, and atmospheric deposition	Monitoring protocol	2015 and ongoing
Ozone risk assessment for Southeast Coast Network (National Park Service, Fort Collins, Colorado)	Data	2014
Evaluation of the Sensitivity of Inventory and Monitoring National Parks to Acidification Effects from Atmospheric Sulfur and Nitrogen Deposition: Main Report (Natural Resource Report NPS/NRPC/ARD/NRR—2011/349)	Data	2011
Evaluation of the Sensitivity of Inventory and Monitoring National Parks to Acidification Effects from Atmospheric Sulfur and Nitrogen Deposition: Southeast Coast Network (SECN) (Natural Resource Report NPS/NRPC/ARD/NRR— 2011/375)	Data	2011
Evaluation of the Sensitivity of Inventory and Monitoring National Parks to Nutrient Enrichment Effects from Atmospheric Nitrogen Deposition: Southeast Coast Network (SECN) (Natural Resource Report NPS/NRPC/ARD/NRR— 2011/329)	Data	2011
Evaluation of The Sensitivity of Inventory and Monitoring National Parks to Nutrient Enrichment Effects from Atmospheric Nitrogen Deposition: Main Report (Natural Resource Report NPS/NRPC/ARD/NRR—2011/313. National Park Service, Denver, Colorado)	Data	2011

Name	Туре	Published
Archeological Resources		
Archeological Investigations at the Visitor Center Midden Site (FOMA-5) (Restricted Access)	Data	1990
Analysis of Collections from the Boardwalk Construction, Visitor Center Midden Site (FOMA-5-8SJ3225) (Restricted Access)	Data	1990
Fort Matanzas National Monument Archeological Investigation of the Terreplein (Restricted Access)	Data	1980
Archeological Investigations at Fort Matanzas National Monument	Data	1976
Archeological Survey of Fort Matanzas National Monument	Data	1966
Biota		1
Protocol for Monitoring Landbird Communities in Southeast Coast Network Parks (Natural Resource Report NPS/SECN/ NRR—2014/853)	Monitoring protocol	2014
Natural Resource Condition Assessment: Castillo de San Marcos and Fort Matanzas National Monuments, Florida (Natural Resource Report NPS/NRPC/WRD/NRR—2012/515)	Data	2012
Vegetation Community Monitoring at Fort Matanzas National Monument, 2009 (Natural Resource Data Series NPS/SECN/ NRDS—2012/255)	Data	2012
Landbird Community Monitoring at Fort Matanzas National Monument, 2010 (Natural Resource Data Series NPS/SECN/ NRDS—2011/297)	Data	2011
Summary of Amphibian Community Monitoring at Fort Matanzas National Monument, 2009 (Natural Resource Data Series NPS/SECN/NRDS—2010/096)	Data	2010
Fort Matanzas National Monument Resource Brief: Landbird Community Monitoring, 2010	Data	2010
Inventory of Marine and Estuarine Benthic Macroinvertebrates for Nine Southeast Coast Network Parks (Natural Resource Report NPS/SECN/NRR—2009/121)	Data	2009
Live-Specimen Key for the Mammals of Southeast Coast Network Parks (Natural Resource Report NPS/SECN/NRR— 2009/122)	Data	2009
Fort Matanzas National Monument Resource Brief: Amphibian Community Monitoring, 2009	Data	2009
Fort Matanzas National Monument Vegetation Community Monitoring, 2009	Data	2009
Climate and Weather		
Climate Change Resource Brief, Recent Climate Change Exposure of Fort Matanzas National Monument	Data	2014
Weather and Climate Inventory, National Park Service, Southeast Coast Network (Natural Resource Technical Report NPS/SECN/NRTR—2007/010)	Data	2007

Name	Туре	Published
Cultural Resources		
National Register of Historic Places Registration Form: Fort Matanzas National Monument Headquarters and Visitor Center	Data	2008
Castillo de San Marcos National Monument Historic Resource Study	Data	1997
Historic Structure Report for Fort Matanzas National Monument	Data	1980
National Register of Historic Places Inventory Nomination Form: Fort Matanzas	Data	1976
Special History Study: Masonry Forts of the National Park Service	Data	1973
Castillo de San Marcos National Monument and Fort Matanzas National Monument Historical Research Management Plan	Data	1967
Miscellaneous		
Inventory & Monitoring Reports, 2000–2013: Fort Matanzas National Monument	Data	2014
Inventory of Coastal Engineering Projects in Fort Matanzas National Monument (Natural Resource Technical Report NPS/ NRSS/GRD/NRTR—2013/703)	Data	2013
Shoreline Length and Water Area in the Ocean, Coastal and Great Lakes Parks: Updated Statistics for Shoreline Miles and Water Acres (rev1b) (Natural Resource Report NPS/WASO/ NRR—2011/464)	Data	2011
Park History		
Fort Matanzas National Monument Superintendent's Compendium of Designations, Closures, Permit Requirements and Other Restrictions Imposed under Discretionary Authority	Administrative history data	2014
Superintendent's Annual Reports FY 1996, 1998, 1999, 2001, 2002, 2003, 2004, and 2005	Administrative history data	2005
Administrative History of Castillo de San Marcos National Monument and Fort Matanzas National Monument	Administrative history report	1986
Sediment and Water		
Assessment of Coastal Water Quality at Fort Matanzas National Monument, 2012 (Natural Resource Data Series NPS/ SECN/NRDS—2013/451)	Data	2013
Fixed-Station Water-Quality Monitoring at Fort Matanzas National Monument: 2012 Data Summary (Natural Resource Data Series NPS/SECN/NRDS—2013/488)	Data	2013
NPS Inventory and Monitoring Program Southeast Coast Network Program Summary: Coastal Water and Sediment Quality Monitoring	Data	2013

Name	Туре	Published
Sediment and Water (continued)		
Field Water Quality Measurements for Coastal Assessments. Southeast Coast Network Standard Operating Procedure NPS/ SECN/SOP-1.2.3	Standard operating procedures	2013
Fixed Station Data Reporting Manual. Southeast Coast Network Standard Operating Procedure NPS/SECN/SOP-2.2.8	Standard operating procedures	2013
Protocol for Monitoring Estuarine Water and Sediment Quality in Selected Southeast Coast Network Parks (Natural Resource Report NPS/SECN/NRR—2013/644)	Monitoring protocol	2013
Water Sample Collection and Processing for Laboratory Analysis of Nutrients and Chlorophyll a for Coastal Assessments; Southeast Coast Network Standard Operating Procedure NPS/SECN/SOP-1.2.4	Standard operating procedures	2013
Fort Matanzas National Monument Assessment of Estuarine Water and Sediment Quality, 2012	Data	2012
Fort Matanzas National Monument Fixed-Station Water- Quality Monitoring Data Summary, 2012	Data	2012
Southeast Coast Network Groundwater Monitoring: Protocol Development and Analysis of Existing Data (Natural Resource Report NPS/SECN/NRR–2009/126)	Monitoring protocol	2009
Fort Matanzas National Monument Baseline Water Quality Data Inventory and Analysis, Fort Collins, Colorado (Restricted Access)	Data	1999
Transportation		
The Road Inventory of Fort Matanzas National Monument (Restricted Access)	Data	2005
Visitor Use		
Fort Matanzas National Monument Visitor Survey Card Data Reports for 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, and 2013	Data	2013

### Southeast Region Foundation Document Recommendation Fort Matanzas National Monument

April 2016

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Southeast Regional Director.

Weson signe

RECOMMENDED Gordie Wilson, Superintendent, Fort Matanzas National Monument

APPROVED

Stan Austin, Regional Director, Southeast Region

04/26/2016

Date

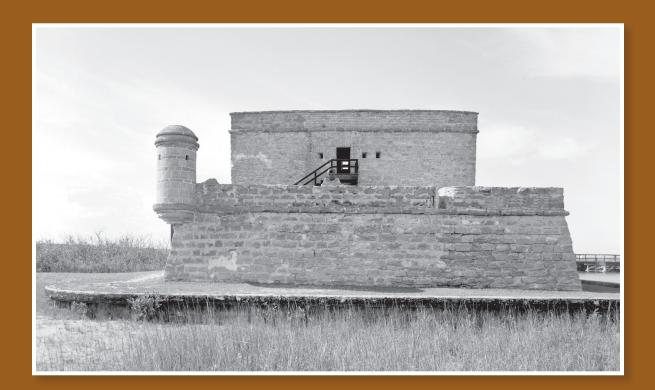
Date



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

FOMA 347/132028 June 2016

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