



State of the Park Report

De Soto National Memorial Florida



2016

On the cover: Photos of De Soto NM clockwise from top left: kayakers; De Soto Trail marker; Reenactor on horse; Reenactors on beach; gumbo limbo tree; musicians; Ranger with visitors

Disclaimer. This State of the Park report summarizes the current condition of park resources, visitor experience, and park infrastructure as assessed by a combination of available factual information and the expert opinion and professional judgment of park staff and subject matter experts. The [internet version](#) of this report provides the associated workshop summary report and additional details and sources of information about the findings summarized in the report, including references, accounts on the origin and quality of the data, and the methods and analytic approaches used in data collection and assessments of condition. This report provides evaluations of status and trends based on interpretation by NPS scientists and managers of both quantitative and non-quantitative assessments and observations. Future condition ratings may differ from findings in this report as new data and knowledge become available. The park superintendent approved the publication of this report.

Executive Summary

The mission of the National Park Service is to preserve unimpaired the natural and cultural resources and values of national parks for the enjoyment, education, and inspiration of this and future generations. NPS Management Policies (2006) state that “The Service will also strive to ensure that park resources and values are passed on to future generations in a condition that is as good as, or better than, the conditions that exist today.” As part of the stewardship of national parks for the American people, the NPS has begun to develop State of the Park reports to assess the overall status and trends of each park’s resources. The NPS will use this information to improve park priority setting and to synthesize and communicate complex park condition information to the public in a clear and simple way.

The purpose of this State of the Park report is to:

- Provide to visitors and the American public a snapshot of the status and trend in the condition of a park’s priority resources and values;
- Summarize and communicate complex scientific, scholarly, and park operations factual information and expert opinion using non-technical language and a visual format;
- Highlight park stewardship activities and accomplishments to maintain or improve the State of the Park;
- Identify key issues and challenges facing the park to help inform park management planning.

De Soto National Memorial (DESO) was authorized by Congress on March 11, 1948 commemorating De Soto’s landing in Florida in 1539 and the first large-scale European exploration of what is now the southeastern portion of the United States and its overwhelming impact on the course of North American history.

De Soto National Memorial comprises approximately 26 acres in Manatee County on the west coast of central Florida. Situated on a spit of land at the mouth of the Manatee River at its confluence with Tampa Bay, the park has more than 3,000 feet of shoreline. Roughly 80% of the park is mangrove estuary. Live oaks and gumbo limbo trees command much of the landscape of the memorial.

Significance statements express why the park unit’s resources and values are important enough to warrant national park unit designation. DESO is significant because:

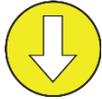
- De Soto’s 1539 expedition was the first large-scale organized European exploration, which traversed 4,000 miles during its four-year quest.
- The contact between De Soto’s expedition and American Indians caused social and cultural instability among indigenous peoples. Within 200 years of the expedition, American Indian populations were drastically reduced as a result of warfare, the introduction of pigs, disease, and the capture and displacement of leaders.
- Written accounts by members of the De Soto expedition were the first widely published and translated documents of their kind, which encouraged and accelerated European powers to explore and colonize North America.

The summary table, below, and the supporting information that follows, provide an overall assessment of the condition of priority resources and values at DESO based on scientific and scholarly studies and expert opinion. The internet version of this report, available at <http://www.nps.gov/stateoftheparks/deso/>, provides additional detail and sources of information about the resources summarized in this report, including references, accounts on the origin and quality of the data, and the methods and analytical approaches used in the assessments. Reference conditions that represent “healthy” ecosystem parameters, and regulatory standards (such as those related to air or water quality) provide the rationale to describe current resource status. In coming years, rapidly evolving information regarding climate change and associated effects will inform our goals for managing park resources, and may alter how we measure the trend in condition of park resources. Thus, reference conditions, regulatory standards, and/or our judgment about resource status or trend may evolve as the rate of climate change accelerates and we respond to novel conditions. In this context, the status and trends documented here provide a useful point-in-time baseline to inform our understanding of emerging change, as well as a synthesis to share as we build broader climate change response strategies with partners.

The Status and Trend symbols used in the summary table below and throughout this report are summarized in the following key. The background color represents the current condition status, the direction of the arrow summarizes the trend in condition, and the thickness of the outside line represents the degree of confidence in the assessment. In some cases, the arrow is omitted because data are not sufficient for calculating a trend (e.g., data from a one-time inventory or insufficient sample size).

Condition Status		Trend in Condition		Confidence in Assessment	
	Warrants Significant Concern		Condition is Improving		High
	Warrants Moderate Concern		Condition is Unchanging		Medium
	Resource is in Good Condition		Condition is Deteriorating		Low

State of the Park Summary Table

Priority Resource or Value	Condition Status/Trend	Rationale
Natural Resources web ▶		
Air Quality		Air pollution may be causing damage to monuments and other cultural resources at DESO. River vistas are often obscured by pollution-caused haze but are improving. Ozone sometimes reaches levels that can make breathing difficult for sensitive groups but is improving. Some vegetation communities and surface water in the park may be susceptible to acidification and nutrient enrichment effects of excess sulfur and nitrogen deposition. Airborne toxics, including mercury, can deposit with rain and accumulate in birds, mammals, amphibians, and fish.
Geologic Processes		Erosion of the park's shoreline is an ongoing concern. Riprap and other erosion control methods have been used for protection of the shoreline, but more is needed.
Plants and Animals		The park supports a rich and thriving Mangrove Forest. Ongoing management of invasive species is successful. Unique Gumbo Limbo trees in the park are being treated, but continue to suffer symptoms of disease. Despite the park's richness, there is little-to-no active biological monitoring by the NPS network.
Dark Night Sky		A photic environment is described as the physical amount and character of light at a particular location, irrespective of human perception. The NPS Night Sky Program characterizes a park's photic environment by measuring both anthropogenic and natural light. Anthropogenic Light Ratio (ALR) is a measure of light pollution calculated as the ratio of median Anthropogenic Sky Glow to average Natural Sky Luminance. ALR for De Soto National Memorial is 9.60, which is considered a moderate condition for urban parks. Population growth for the Tampa-St. Petersburg and Bradenton-Sarasota metropolitan areas have been moderate (>5%) over the last five years, resulting in a negative trend (U.S. Census Bureau 2015).

Priority Resource or Value	Condition Status/Trend	Rationale
Acoustic Environment		All sound resources, whether audible or not, are referred to as the <i>acoustic environment</i> of a park. The quality of the acoustic environment affects park resources including wildlife, cultural resources, the visitor experience, and landscapes. The condition of the acoustic environment is assessed by determining how much man-made noise sources contribute to the acoustic environment through the use of a national noise pollution model. This measure is referred to as the <i>mean acoustic impact level</i> . Impact is measured in A-weighted decibels (dBA). The mean acoustic impact level at the park is 8.6 dBA, meaning that the condition of the acoustic environment warrants moderate concern. Overall, long-term projected increases in ground-based and aircraft traffic indicate a deteriorating trend in the quality of acoustic resources at this location.
Cultural Resources web ▶		
Archeological Resources		The park's known archeological resources are in good condition, except for the Tabby House Ruins. The overall level of documentation for the known archeological sites is good but only 13.1% of the park has been intensively surveyed. Sea level rise is a threat to the park's archeological resources.
Cultural Anthropology		An ethnographic overview and assessment has not been completed for De Soto. The park would benefit from a cultural anthropology perspective with respect to further research and interpretation of its other significant resources. The park is in need of identifying traditionally associated people and other affected groups. Tribal consultation is one key requirement to identify Native American interests and culturally affiliated tribes
Cultural Landscapes		The relationship of the park's historic contexts and cultural landscapes is not fully addressed in the existing National Register nomination, and no comprehensive study of the cultural landscape has been completed. A cultural landscape report (CLR) began in 2015. This document will better illustrate the historic context & cultural landscape connection.
Historic Structures		A determination of eligibility for the National Register of Historic Places is needed for the park's Mission 66 visitor center.
History		There is a large body of research related to De Soto's expedition and its impacts, as well as the primary source documentation. The most recent National Register Nomination (Shaw's Point) was completed in 2001. Additional site-specific information could be obtained through preparation of a historic resource study and an Administrative History. Areas for further research might include the Underground Railroad; historic black community of Angola; Cuban fishing ranchos; and historic Native American tribes, such as the Seminole Indians.
Museum Collections		Several museum plans and documents completed within the past few years. The park has made significant improvements to the exhibits and currently meets 85.71% of museum collection preservation and protection (MCPPP) standards. In the past five years, 68,821 objects, specimens, and archival documents have been cataloged. Efforts to increase access to collections through digitization are ongoing.

Priority Resource or Value	Condition Status/Trend	Rationale
Visitor Experience web ▶		
Number of Visitors		This relatively small park has a yearly annual visitation of over 140,000.
Visitor Satisfaction		Visitor satisfaction is over 99%.
Interpretive and Education Programs – Talks, Tours, and Special Events		Special Events are at the heart of DESO’s interpretive program, with the Desoto Landing Reenactment illustrating why the park is there. Annual special events draw thousands to the park, events such as the Winter Luminary and Desoween filling the park to capacity. Living history and demonstrations take place seasonally. Innovative tour formats such as the Ranger Led Kayak Tour provide a diverse array of available learning formats.
Interpretive Media – Brochures, Exhibits, Signs, and Website		Over the last 5 years there have been improvements to most of the park’s interpretive media. The movie theater was converted into a multi-purpose theater, museum, and meeting room. Signage and viewing areas around the park have been updated and enhanced. The park movie needs updating.
Accessibility		The park continues to make trails and facilities accessible.
Safety		Safety is a high priority and the park has a low number of incidents.
Partnerships		Partnerships are vital to DESO’s functionality. In the last 5 years DESO has engaged over 35 formal and informal partnerships.
Park Infrastructure web ▶		
Overall Facility Condition Index		The overall Facility Condition Index for 17 assets for FY15 is 0.041, which is Good based on industry and NPS standards.

Summary of Stewardship Activities and Key Accomplishments to Maintain or Improve Priority Resource Condition

The list below provides examples of stewardship activities and accomplishments by park staff and partners to maintain or improve the condition of priority park resources and values for this and future generations:

Natural Resources

- Assessment and treatment of the park's iconic Gumbo limbo trees to assist with recovery where possible and keep the trees as long as possible.
- Abatement of non-native/invasive plant species is ongoing. 100% of the park is assessed and treated.
- Shoreline protection with rip-rap and other measures is ongoing.

Cultural Resources

- Completed tribal consultations and will complete NAGPRA repatriations in 2015.
- Established partnership with the Chickasaw Nation for exhibits, interpretation, and other educational media.
- Improvements made to the visitor center facility expand the ability to exhibit museum collections and develop rotating exhibits.
- Digitization projects are improving on-site access to museum objects and archives. Cataloged 68,821 objects, specimens, and archival documents since 2009.

Visitor Experience

- Updates and enhancement to the scope of the interpretation of the De Soto Expedition and park history have been revised to include more information related to the Native American's story in the local area.
- Established the Native American shell mound viewing area, which calls attention to the Native American side of the DESO story (partnered with Southeastern Archeological Conference and DESO Youth Advisory Committee).
- Established ranger-led Kayak Tours, a unique way to experience the park, and the first tour of its kind offered in a historic park.
- Special events such as Desoween, Winter Luminary, Five Centuries of Florida History, and Concerts on the Lawn continue to attract and engage an increasing number of visitors.
- DESO's award-winning Junior Ranger Guidebook and Junior Ranger Camp have continued success.

Park Infrastructure

- Completed the 500-foot berm-restoration project, placing 140 tons of rock rip-rap and an additional 450 linear feet of shell material to stabilize the shoreline and slow erosion.
- Remodeled the museum/theatre space into a multi-purpose space. Demolished the existing drop ceiling, upgraded electrical, HVAC and lighting.
- Redesigned and re-constructed the Living History Area, complete with wooden bleachers to replace old aluminum benches.
- Repaired and improved the ADA-accessible deck in the Living History Area.
- Worked with Manatee County Historic Wooden Boat Shop. DESO assisted with restoration and placement of a 25ft 16th-century replica of a Spanish long boat. The boat is now used for Living History Camp.

Key Issues and Challenges for Consideration in Management Planning

De Soto National Memorial made a move to tell a balanced story of the historical events that occurred during the De Soto expedition. The park has implemented talks and exhibits that represent the Native American cultures that the 4,000-mile, four-year-long expedition encountered through the journey. As part of these efforts, a Jr. Ranger (Award Winning) book was developed as well as on-site exhibits and programs.

De Soto National Memorial has become once again, an icon in our community. Historically a spot for historic reenactments, the park had not been as active in community engagement and outreach activities in the recent past; but that has improved over the course of the last five years. The Parks-In-Classroom program and the award-winning Jr. Ranger Activity Book have been great tools to incentivize and improve park visitation. The establishment and continuous improvement of park special events, paired with an increased promotion of the events in the community, have changed the dynamics of park recognition with locals and out-of-state visitors. As the park develops partnerships with both government agencies and non-government organizations, we continue to grow our community engagement.

Chapter 1. Introduction

The purpose of this State of the Park report for De Soto National Memorial is to assess the overall condition of the park's priority resources and values, to communicate complex park condition information to visitors and the American public in a clear and simple way, and to inform visitors and other stakeholders about stewardship actions being taken by park staff to maintain or improve the condition of priority park resources for future generations. The State of the Park report uses a standardized approach to focus attention on the priority resources and values of the park based on the park's purpose and significance, as described in the park's Foundation Document or General Management Plan. The report:

- Provides to visitors and the American public a snapshot of the status and trend in the condition of a park's priority resources and values.
- Summarizes and communicates complex scientific, scholarly, and park operations factual information and expert opinion using non-technical language and a visual format.
- Highlights park stewardship activities and accomplishments to maintain or improve the state of the park.
- Identifies key issues and challenges facing the park to inform park management planning.

The process of identifying priority park resources by park staff and partners, tracking their condition, organizing and synthesizing data and information, and communicating the results will be closely coordinated with the park planning process, including natural and cultural resource condition assessments and Resource Stewardship Strategy development. The term "priority resources" is used to identify the fundamental and other important resources and values for the park, based on a park's purpose and significance within the National Park System, as documented in the park's foundation document and other planning documents. This report summarizes and communicates the overall condition of priority park resources and values based on the available scientific and scholarly information and expert opinion, irrespective of the ability of the park superintendent or the National Park Service to influence it.

De Soto National Memorial (DESO) was authorized by Congress on March 11, 1948, to establish an appropriate memorial to Spanish explorer Hernando de Soto, and to construct a suitable memorial structure for the benefit of the people of the United States. De Soto National Memorial commemorates De Soto's landing in Florida in 1539 and the first large-scale European exploration of what is now the southeastern portion of the United States and its overwhelming impact on the course of North American history.

De Soto National Memorial comprises approximately 26 acres in Manatee County on the west coast of central Florida. Situated on a spit of land at the mouth of the Manatee River at its confluence with Tampa Bay, the park has more than 3,000 feet of shoreline. Roughly 80% of the park is mangrove estuary with the remainder consisting of pine uplands and mixed hardwoods, remnant shell ridges, and deposited dredge material from the adjacent Manatee River. Live oaks and gumbo limbo trees command much of the landscape of the memorial.

Significance statements express why the park unit's resources and values are important enough to warrant national park unit designation. DESO is significant because:

- De Soto's 1539 expedition was the first large-scale organized European exploration, which traversed 4,000 miles during its four-year quest.
- The contact between De Soto's expedition and American Indians caused social and cultural instability among indigenous peoples. Within 200 years of the expedition, American Indian populations were drastically reduced as a result of warfare, the introduction of pigs, disease, and the capture and displacement of leaders.
- Written accounts by members of the De Soto expedition were the first widely published and translated documents of their kind, which encouraged and accelerated European powers to explore and colonize North America.



Map of the Park

Chapter 2. State of the Park

The State of the Park is summarized below for four categories—Natural Resources, Cultural Resources, Visitor Experience, and Park Infrastructure—based on a synthesis of the park’s monitoring, evaluation, management, and information programs, and expert opinion. Brief resource summaries are provided below for a selection of the priority resources and values of the park. Clicking on the [web](#) ► symbol found in the tables and resource briefs below will take you to the internet site that contains content associated with specific topics in the report.

The scientific and scholarly reports, publications, datasets, methodologies, and other information that were used as the basis for the assessments of resource condition are referenced and linked throughout the report and through the [internet version of this report](#) that is linked to the NPS [IRMA data system](#) (Integrated Resource Management Applications). The internet version of each report, and the associated workshop summary report available from the internet site, provide additional detail and sources of information about the findings summarized in the report, including references, accounts on the origin and quality of the data, and the methods and analytical approaches used in data collection and the assessments of condition. Resource condition assessments reported in this State of the Park report involve expert opinion and the professional judgment of park staff and subject matter experts involved in developing the report. This expert opinion and professional judgment derive from the in-depth knowledge and expertise of park and regional staff gained from their being involved in the day-to-day practice of all aspects of park stewardship and from the professional experience of the participating subject matter experts. This expert opinion and professional judgment utilized available factual information for the analyses and conclusions presented in this report. This State of the Park report was developed in a park-convened workshop.

The status and trends documented in Chapter 2 provide a useful point-in-time baseline measured against reference conditions that represent “healthy” ecosystem parameters, or regulatory standards (such as those related to air or water quality). We also note that climate change adaptation requires us to continue to learn from the past, but attempting to manage for conditions based on our understanding of the historical “natural” range of variation will be increasingly futile in many locations. Thus, these reference conditions, and/or our judgment about resource condition or trend may evolve as the rate of climate change accelerates and we respond to novel conditions. Our management must be even more “forward looking,” to anticipate plausible but unprecedented conditions, also recognizing there will be surprises. In this context, we will incorporate climate considerations in our decision processes and management planning as we consider adaptation options that may deviate from traditional practices.

2.1. Natural Resources

Air Quality  web ►			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Visibility	Haze Index		Visibility warrants significant concern. This condition is based on NPS Air Resources Division benchmarks and the 2008–2012 estimated visibility on mid-range days of 9.7 deciviews (dv) above estimated natural conditions of 7.6 dv. For 2003–2012, the trend in visibility improved on both the 20% clearest days and 20% haziest days, resulting in an overall improving visibility trend. The degree of confidence in the visibility condition and trend is high because of the nearby visibility monitor (IMPROVE Monitor ID: CHAS1, FL; NPS-ARD 2015).

Air Quality (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Ozone	Human Health: Annual 4th-Highest 8-Hour Concentration		<p>Human health risk from ground-level ozone warrants moderate concern. This condition is based on NPS Air Resources Division benchmarks and the 2008–2012 estimated ozone of 68.5 parts per billion (ppb). Ozone is a respiratory irritant, causing coughing, sinus inflammation, chest pains, scratchy throat, lung damage, and reduced immune system functions. Children, the elderly, people with existing health problems, and active adults are most vulnerable. For 2003–2012, the trend in ozone concentration improved. The degree of confidence in the condition and trend is high because there is a nearby representative ozone monitor (AQS Monitor ID: 120814012, FL; NPS-ARD 2015).</p>
	Vegetation Health: 3-month maximum 12-hour W126		<p>Vegetation health risk from ground-level ozone is in good condition. This condition is based on NPS Air Resources Division benchmarks and the 2008–2012 estimated W126 metric of 6.8 parts per million-hours (ppm-hrs). The W126 metric is biologically-relevant and focuses on the plant response to ozone exposure during daylight hours over the growing season. There are ozone-sensitive plants in the park including Virginia creeper (<i>Parthenocissus quinquefolia</i>) and American elder (<i>Sambucus Canadensis</i>). For 2003–2012, the trend in the W126 metric remained relatively unchanged (no statistically significant trend). The degree of confidence in the condition and trend of is high because there is a nearby representative ozone monitor (AQS Monitor ID: 120814012, FL; NPS-ARD 2015).</p>
Deposition	Sulfur Wet Deposition		<p>Wet sulfur deposition warrants moderate concern. This condition is based on NPS Air Resources Division benchmarks of 2.7 kilograms per hectare per year (kg/ha/yr) (NPS-ARD 2015). Acidification effects can include changes in water and soil chemistry that impact ecosystem health. Acidification can also cause damage to stone, painted, and metal monuments and other cultural resources. Sulfur dioxide from combustion is the main contributor among gaseous pollutants to deterioration of stone and some metals (Charola 1998). The degree of confidence in the condition is medium because estimates are based on interpolated data from more distant deposition monitors.</p>

Air Quality (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p>Deposition (continued)</p>	<p>Nitrogen Wet Deposition</p>		<p>Wet nitrogen deposition warrants moderate concern. This condition is based on NPS Air Resources Division benchmarks and the 2008–2012 estimated wet nitrogen deposition of 2.8 kilograms per hectare per year (kg/ha/yr) (NPS-ARD 2015). Although runoff can contribute substantial amounts of nitrogen to waterways, atmospheric deposition of nitrogen to the surrounding watershed can also contribute significantly. Some vegetation communities in the park, including lichen and forest vegetation are at risk for harmful effects to excess nitrogen deposition (Pardo 2011, NADP-TDEP 2014). Excess nitrogen can also cause invasive exotic plant species to grow faster and out-compete native vegetation adapted to low nitrogen conditions (Blett & Eckert 2013, Bobbink et al. 2010). The degree of confidence in the condition is medium because estimates are based on interpolated data from more distant deposition monitors.</p>
	<p>Mercury/Toxics Deposition</p>		<p>Mercury/toxics deposition warrants significant concern. DESO has high mercury deposition relative to other areas of the United States (NADP-MDN 2014). This is likely due in part to nearby sources of mercury such as coal-burning power plants and waste incinerators, and global atmospheric transport patterns that favor deposition in and around South Florida. High mercury concentrations in birds, mammals, amphibians, and fish can result in reduced foraging efficiency, survival, and reproductive success. Elevated levels of mercury in humans can affect the brain, kidneys, and reproductive function. Wet and dry deposition can lead to mercury loadings in water bodies, where mercury may be converted to a bioavailable toxic form of mercury, methylmercury, and bioaccumulate through the food chain. Wetlands, especially those rich in organic matter, are important sites for methylmercury production. There is a mercury statewide fish consumption advisory for freshwater, coastal, and other water bodies including DESO (EPA NLFA 2015, Florida DOH 2016). The degree of confidence in the condition is low because there are no park-specific studies examining contaminant levels in taxa from park ecosystems.</p>

Geologic Processes



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Shoreline Stability	Erosion		<p>Constant boat traffic adds to the natural erosion of the shoreline. Riprap and other erosion control method have added to the protection of the shoreline. Riprap has been added to once in the last five years. Our observations have indicated that the sand shifts have not—to the northeast shore of the park.</p> <p>NPS staff has noticed increased erosion on the east end of the boardwalk towards the point, but riprap has not yet been reapplied to the area.</p> <p>Conversation has begun with local agencies to gain a sign to reduce speed of boat traffic on the adjacent river.</p>

Plants and Animals



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Plants	Species diversity		The park supports a rich and diverse plant community commonly associated with Mangrove Forests. The natural FL coastal wetland estuary and environment give visitors an understanding of the lifeways of indigenous peoples and the obstacles that the DESO expedition encountered. The park contains over 100 different plant species, 25 of which are non-native.
Invasive Plants	Richness and diversity		The park contains invasive plant species that are monitored and removed regularly. Common invasive plant species include Brazilian Peppers (<i>Schinus terebinthifolius</i>) and Carrot Wood trees (<i>Cupaniopsis anacardioides</i>).
Gumbo Limbo Trees	Gumbo Limbo Health		All trees in grove diseased. Large Champion Tree at end of lifespan. Nutrient treatments. Tree roped off—dangerous.
Animals	Species diversity		There have been 119 species of birds, 19 species of reptiles and amphibians, and 8 mammal species documented by the Florida Fish and Wildlife Conservation Commission (FWC), and United States Fish and Wildlife Service (FWS). Coyote sightings within the park have increased in the last year.

Plants and Animals (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Animal Species of Special Concern	Species diversity		Animal species of special concern include the Bald Eagle (<i>Haliaeetus leucocephalu</i>), which is protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and the Lacey Act. Additionally, Loggerhead sea turtles (<i>Caretta caretta</i>), Wood storks (<i>Mycteria americana</i>), and Gopher tortoise (<i>Gopherus polyphemus</i>) which are all federally protected species. The Gopher tortoise is a keystone species whose burrows support over 350 other species of animals.

Resource Brief: National Champion Gumbo Limbo Tree

This gumbo limbo tree (*Bursera simaruba*) was listed as an American Forests Champion Tree in 2007. It is the national champion tree for this species. Estimated to be almost 100 years old, this witness tree was present when the Colonial Dames of America dedicated the nearby De Soto Trail monument in 1939. It is an important part of the cultural landscape surrounding the granite monument. Unfortunately, the tree has developed a fungal disease and is reaching the end of its lifespan. Local fundraising efforts have helped to stabilize the tree in its current condition.

As is the case with the giant sequoia in Yosemite National Park and the cherry trees at The National Mall in Washington, DC, the iconic gumbo limbo trees draw visitors to the De Soto National Memorial. The champion tree is about 90 years old, is 45 feet tall with a spread of 73 feet, and has a trunk circumference of 195 inches. But a deadly fungus is threatening the existence of these majestic and beautiful-but-aging trees. The wood-eating fungus, called *Ganoderma*, has been growing on the base of the biggest tree and feeding on the living part of the plant just under the bark. This blocks the nutrients from going up the trunk and allows water to get into the inner wood, causing it to rot. The largest of the 14 gumbo limbos in the grove outside the visitor's center is of major concern because it is a popular focal point for many regular visitors. Last September, staff at the park had to put an end to what had become a park tradition of people gathering under the tree and roped off the 90-year old Gumbo Limbo. A public plea to raise \$10,000 to save the champion tree and 13 other gumbo limbos went out in September and the public responded by donating about 75% of the funds. Treatment has taken place and will be ongoing to ensure that the younger gumbo limbos survive and the park's iconic centerpiece's life is prolonged for as long as possible.





Resource Brief: Coastal Environment Stewardship

The park is approximately 80% mangrove forest and coastal vegetation. There is no active restoration or removal of native plant species currently taking place within the park. All vegetation is protected, and damage or alteration of the delicate estuary ecosystem is avoided. Park Rangers and volunteers periodically monitor mangroves and coastal vegetation to identify damages and health threats within the wetland ecosystem.

The park conducts several coastal cleanups throughout the year. Volunteers join the staff to remove trash and debris from along park trails and shorelines. In order to protect the sensitive coastal areas and minimize erosion, rip-rap is placed and replenished as needed along sections of shoreline prone to erosion due to wave and tidal activity. These barriers minimize shoreline loss and protect the plants that grow there. The park's goal is to maintain and sustain the health and productivity of the coastal plant species within our boundaries. Active public outreach and education is an ongoing, with Ranger Tours, Kayak Tours and distribution of handouts highlighting the importance of mangroves as soil builders, filters, and nurseries for our coastal marine ecosystem.

Invasive species management is limited to plants within the park. Exotic plant removal is done by park staff regularly. Invasive species of special concern include: *Cupaniopsis anacardioides* (carrot wood), *Schinus terebinthifolius* (Brazilian pepper), and *Dioscorea bulbifera* (air potato) as well as many others.

De Soto National Memorial is part of the Florida/Caribbean Exotic Plant Management Team (FLC-EPMT). This team is comprised of 15 National Park System sites in Florida and the U.S. Virgin Islands. The management team specializes in the identification and removal of exotic plants. Teams create a work plan tailored to the needs of their partner parks, which may include cooperation and collaboration, inventory and monitoring, prevention, treatment and control, and restoration.



Ornamental invasive: *Schinus terebinthifolius* (Brazilian pepper)



Backbone of the coastal ecosystem, *Rhizophora mangle* (Red mangrove) grows roots that arch above the water level, giving stands of this tree the characteristic mangrove appearance.

Dark Night Sky



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Anthropogenic Light	Anthropogenic Light Ratio (ALR) — Average Anthropogenic Sky Glow: Average Natural Sky Luminance		The modeled Anthropogenic Light Ratio (ALR), a measure of light pollution, is 9.60, which falls within the moderate condition for urban parks. Population growth for the Tampa-St. Petersburg and Bradenton-Sarasota metropolitan areas have been moderate (>5%) over the last five years, resulting in a negative trend (2015 U.S. Census Bureau).

Resource Brief: Night Sky Resources at De Soto National Memorial

The night sky has been a source of wonder, inspiration, and knowledge for thousands of years. Unfettered night skies with naturally occurring cycles of light and dark are integral to ecosystem function as evident by the fact that nearly half the species on earth are nocturnal. The quality of the nighttime environment is relevant to nearly every unit of the NPS system as the nighttime photic environment and its perception of it by humans (the lightscape) are both a natural and a cultural resource and are critical aspects of scenery, visitor enjoyment, and wilderness character.

Condition and Functional Consequences

Night sky quality at De Soto National Memorial is moderate with a median ALR of 9.60. This is considered a moderate condition for urban parks. At these light levels the Milky Way has lost most of its detail and is not visible near horizon. Zodiacal light is rarely seen and anthropogenic light dominates natural celestial features. Some shadows from distant lights may be seen, and dark adaptation may be possible in at least some directions, though visible shadows are likely present.

Assessment

One way the Natural Sounds & Night Sky Division (NSNSD) scientists measure the quality of the photic environment is by measuring the median sky brightness levels across a park and comparing that value to average natural night sky luminance. This measure, called the Anthropogenic Light Ratio (ALR), can be directly measured with ground based measurements, or when these data are unavailable are modeled. The GIS model, calibrated to ground based measurements in parks, is derived from the 2001 World Atlas of Night Sky Brightness, which depicts zenith sky brightness (the brightness directly above the observer). Anthropogenic light up to 200 kilometers from parks may degrade a park’s night sky quality, and is considered in the neighborhood analysis. This impact is illustrated in the corresponding ALR map with a 200km ring around the park center.

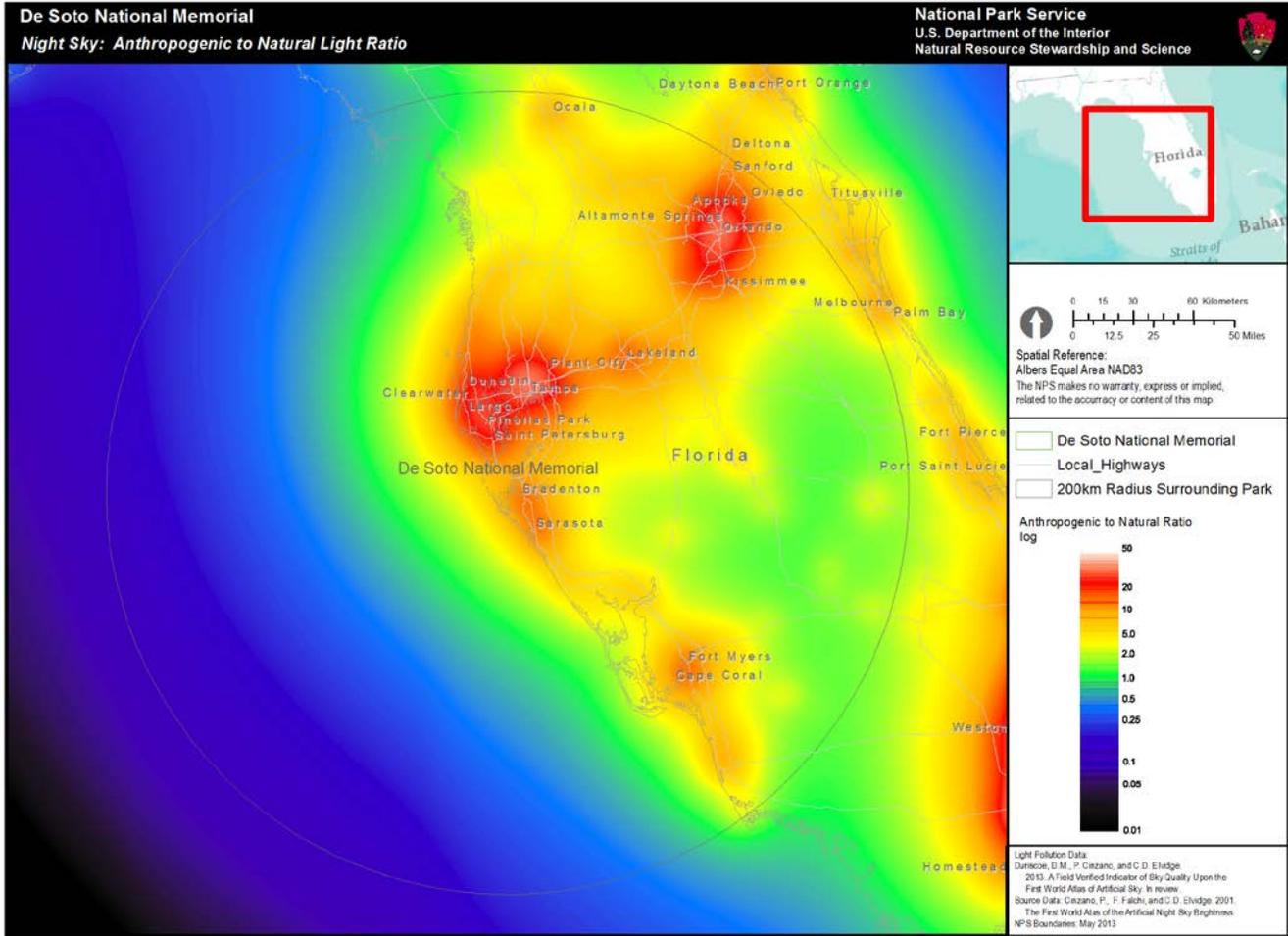
The ALR thresholds are applied spatially to the park. For both urban and non-urban parks, the designated condition (green, amber, red) corresponds to the ALR level that exists in *at least half of* (median condition) the park’s landscape (see table below). Thus it is probable that a visitor will be able to experience the specified night sky quality. It is also probable that the majority of wildlife and habitats found within the park will exist under the specified night sky quality. For parks with lands managed as wilderness, the designated condition is based on the ALR level that exists in more than 90% of the wilderness area.

Criteria for Impact

Two impact criteria were established to address the issue of urban and non-urban park night sky resources. Parks within urban areas, as designated by the U.S. Census Bureau, are considered less sensitive to the impact of anthropogenic light and are assessed using higher thresholds of impact. Parks outside of designated urban areas are considered more sensitive to the impact of anthropogenic light and are assessed using lower thresholds of impact. According to the U.S. Census Bureau, De Soto National Memorial is categorized as urban, or less sensitive ([2010 U.S. Census Bureau](#)). Learn more in the document [Recommended Indicators of Night Sky Quality](#), and the NPS Natural Sounds & Night Skies Division [website](#).

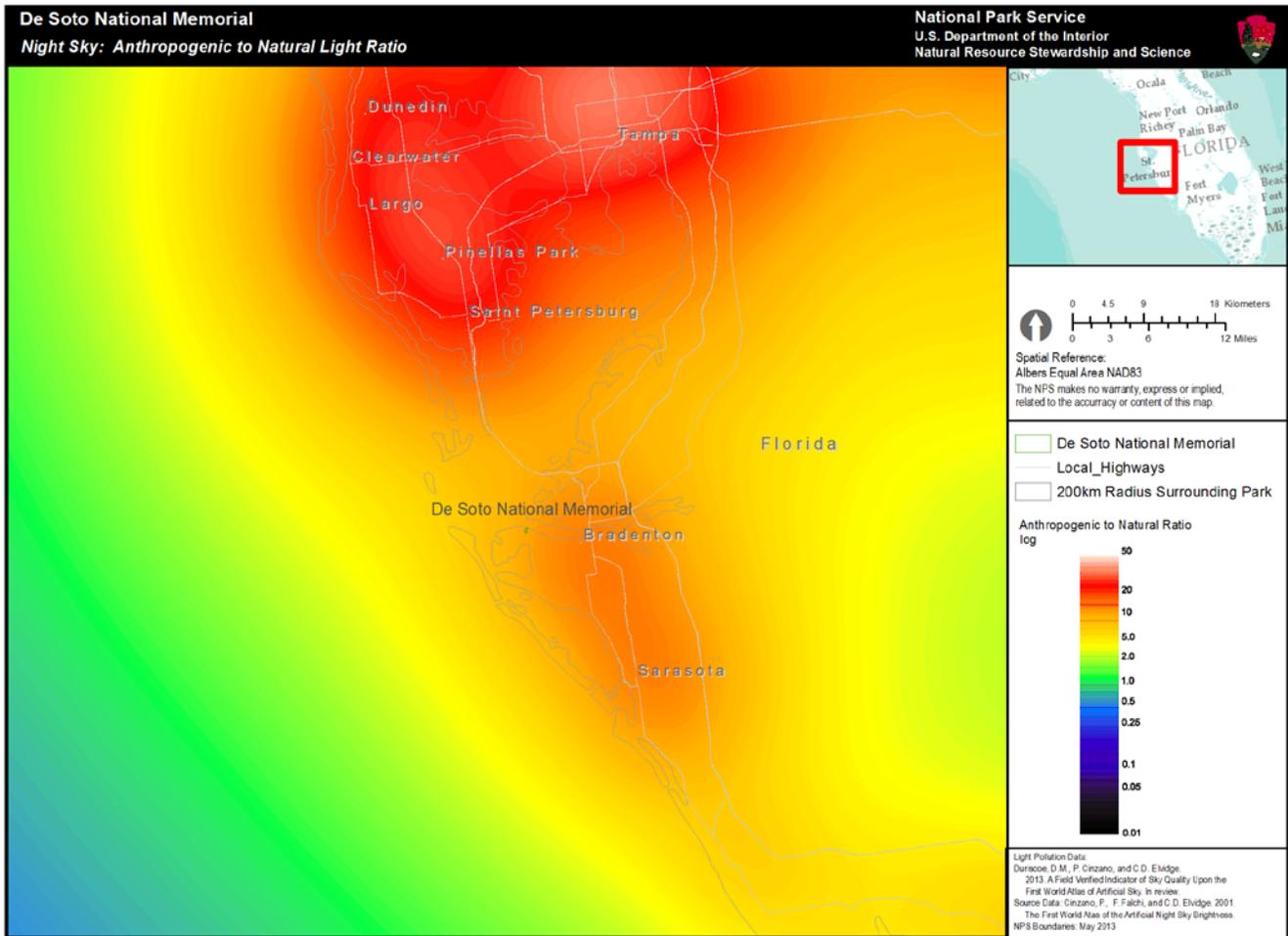
Thresholds for Level 1 and 2 Parks

Indicator	Threshold for Level 1 Parks – Non-Urban	Additional Threshold for Areas Managed as Wilderness	Threshold for Level 2 Parks – Urban
Anthropogenic Light Ratio (ALR)— Average Anthropogenic All-Sky Luminance : Average Natural All-Sky Luminance	ALR < 0.33 (<26 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR < 0.33 (<26 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR < 2.00 (<156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>
Light flux is totaled above the horizon (the terrain is omitted) and the anthropogenic and natural components are expressed as a unitless ratio	ALR 0.33–2.00 (26–156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR 0.33–2.00 (26–156 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR 2.00–18.00 (156–1404 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>
The average natural sky luminance is 78 nL	ALR > 2.00 (>156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR > 2.00 (>156 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR > 18.00 (>1404 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>



Created by NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group on 20150416

Regional view of anthropogenic light near De Soto National Memorial. White and red represents more environmental influence from artificial lights while blues and black represent less artificial light. This scale shows regional context and how far reaching the impacts of artificial lighting can be. While De Soto National Memorial may be influenced by artificial light it still maintains more naturalness than surrounding areas and serves as a harbor of dark skies.



Created by NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group on 20150416

Local view of anthropogenic light near De Soto National Memorial. White and red represents more environmental influence from artificial lights while blues and black represent less artificial light. While De Soto National Memorial may be influenced by artificial light it still maintains more naturalness than surrounding areas and serves as a harbor of dark skies.

Acoustic Environment



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Acoustic Impact Level	A modeled measure of the noise (in dBA) contributed to the acoustic environment by man-made sources.		The condition of the acoustic environment is assessed by determining how much noise man-made sources contribute to the environment through the use of a national noise pollution model. The mean acoustic impact level at the park is 8.6 dBA, meaning that the condition of the acoustic environment warrants moderate concern. Overall, long-term projected increases in ground-based (Federal Highway Administration 2013) and aircraft traffic (Federal Aviation Administration 2010) indicate a deteriorating trend in the quality of acoustic resources at this location.

Resource Brief: Acoustic Environment at De Soto National Memorial

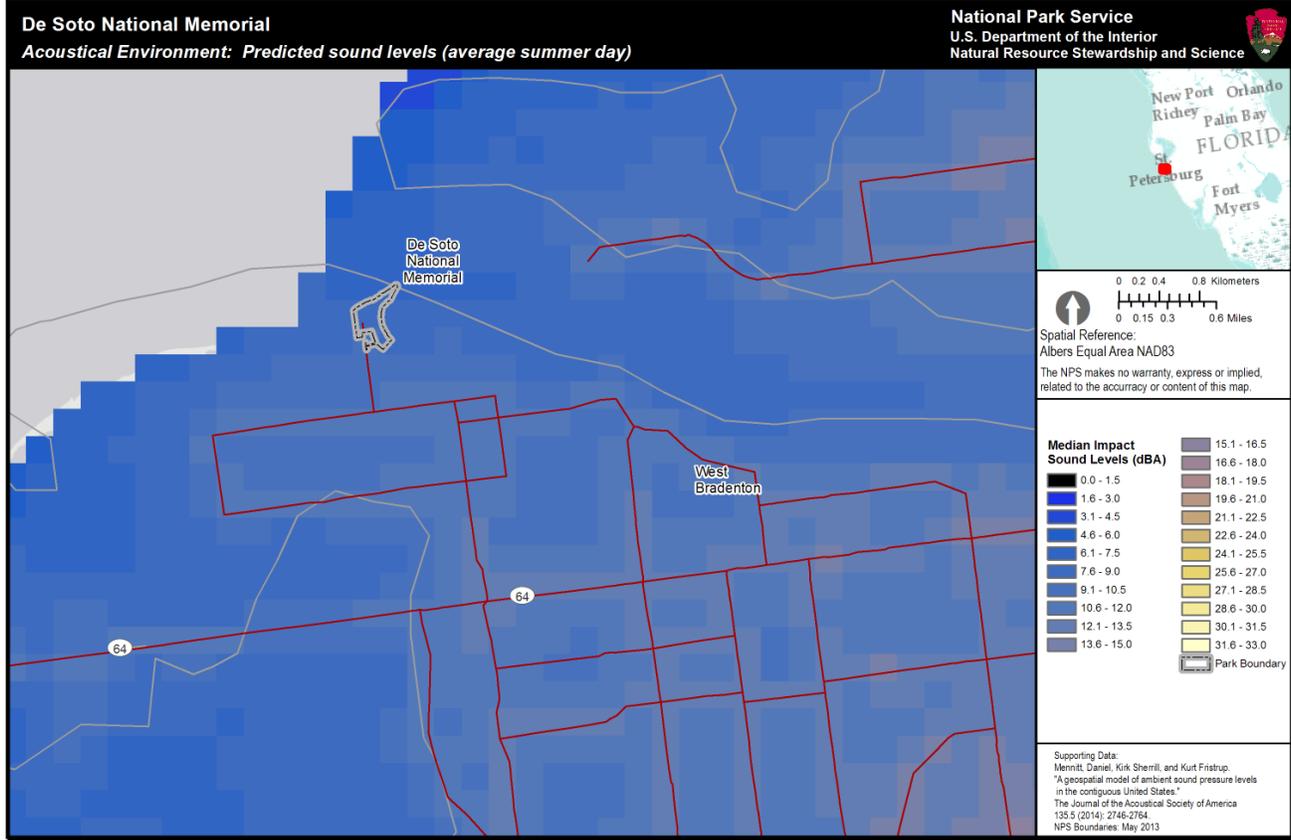
To characterize the acoustic environment, the National Park Service has developed a national model of noise pollution (Mennitt et al. 2014). This model predicts the increase in sound level due to human activity on an average summer day. The model is based on measured sound levels from hundreds of national park sites and approximately 100 other variables such as location, climate, vegetation, hydrology, wind speed, and proximity to noise sources such as roads, railroads, and airports. The model reveals how much quieter parks would be in the absence of human activities. The quality of the acoustic environment affects visitor experience and ecological health. Acoustic resource condition, both natural and cultural, should be evaluated in relation to visitor enjoyment, wilderness character, ecosystem health, and wildlife interactions. Learn more in this [document](#), the figures below, and the NPS Natural Sounds & Night Skies Division [website](#).

Criteria for Condition Status/Trend

For State of the Park Reports, NPS has established acoustic standards (green, amber, red) and two sets of impact criteria for urban parks and non-urban parks. A park's status (urban or non-urban) is based on data from the U.S. Census Bureau ([U.S. Census 2010](#)). Parks outside designated urban areas typically possess lower sound levels, and exhibit less divergence between existing sound levels and predicted natural sound levels. These quiet areas are highly susceptible to subtle noise intrusions. Park units inside designated urban areas typically experience more interference from noise sources. Condition thresholds for urban parks are listed in the table below. Just as smog limits one's ability to survey a landscape, noise reduces the area in which important sound cues can be heard. Therefore, thresholds in the table are also explained in terms of listening area.

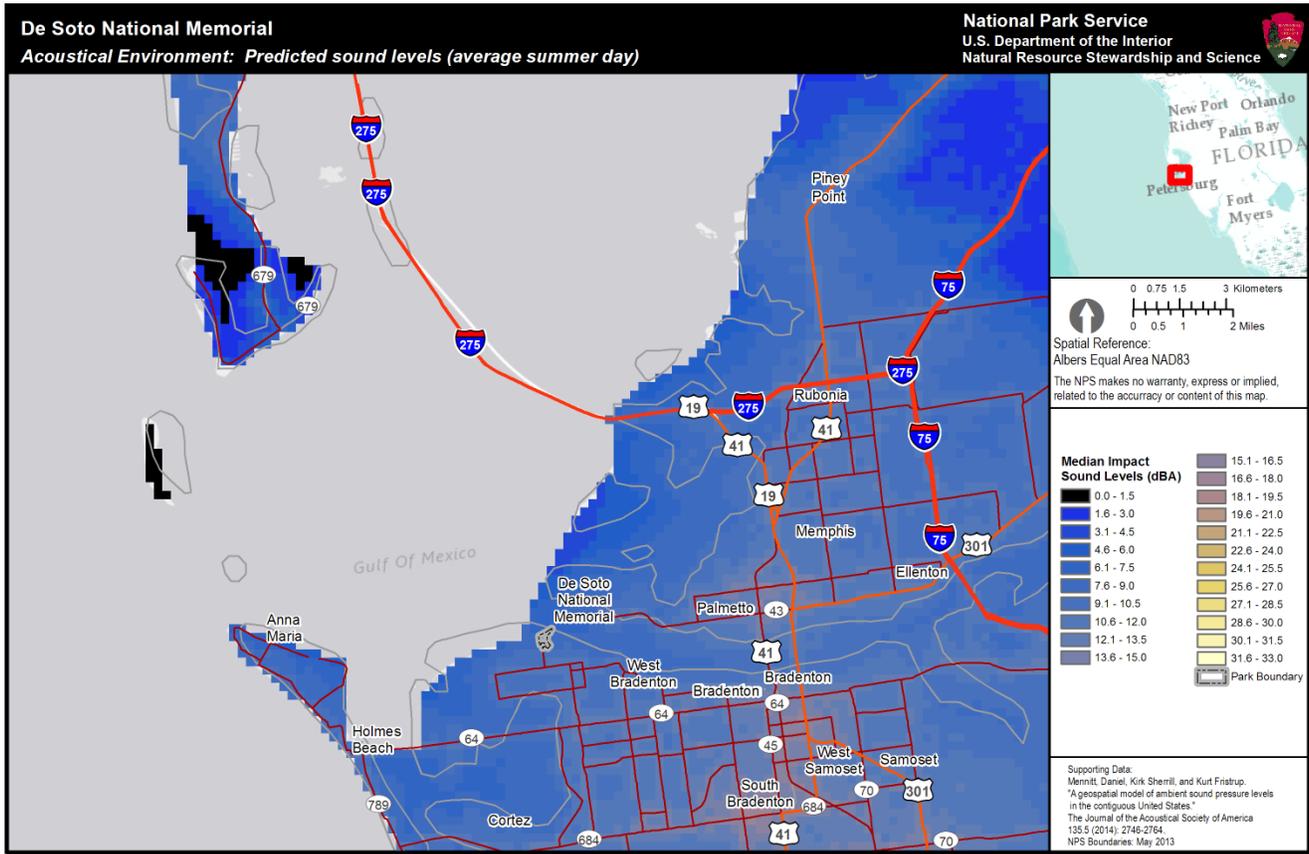
Condition thresholds for the acoustic environment in urban parks

Indicator	Threshold (dBA)
Acoustic Impact Level A modeled measure of the noise (in dBA) contributed to the acoustic environment by man-made sources.	Threshold ≤ 6.0 <i>Listening area reduced by $\leq 75\%$</i>
	$6.0 < \text{Threshold} \leq 12$ <i>Listening area reduced by 75–94%</i>
	$12 < \text{Threshold}$ <i>Listening area reduced by $> 94\%$</i>



NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150413

Map of predicted acoustic impact levels in the park for an average summer day. The mean acoustic impact level at the park is 8.6 dBA. The color scale indicates how much man-made noise increases the sound level (in A-weighted decibels, or dBA), with 270 meter resolution. Black or dark blue colors indicate low impacts while yellow or white colors indicate greater impacts. Note that this graphic may not reflect recent localized changes such as new access roads or development.



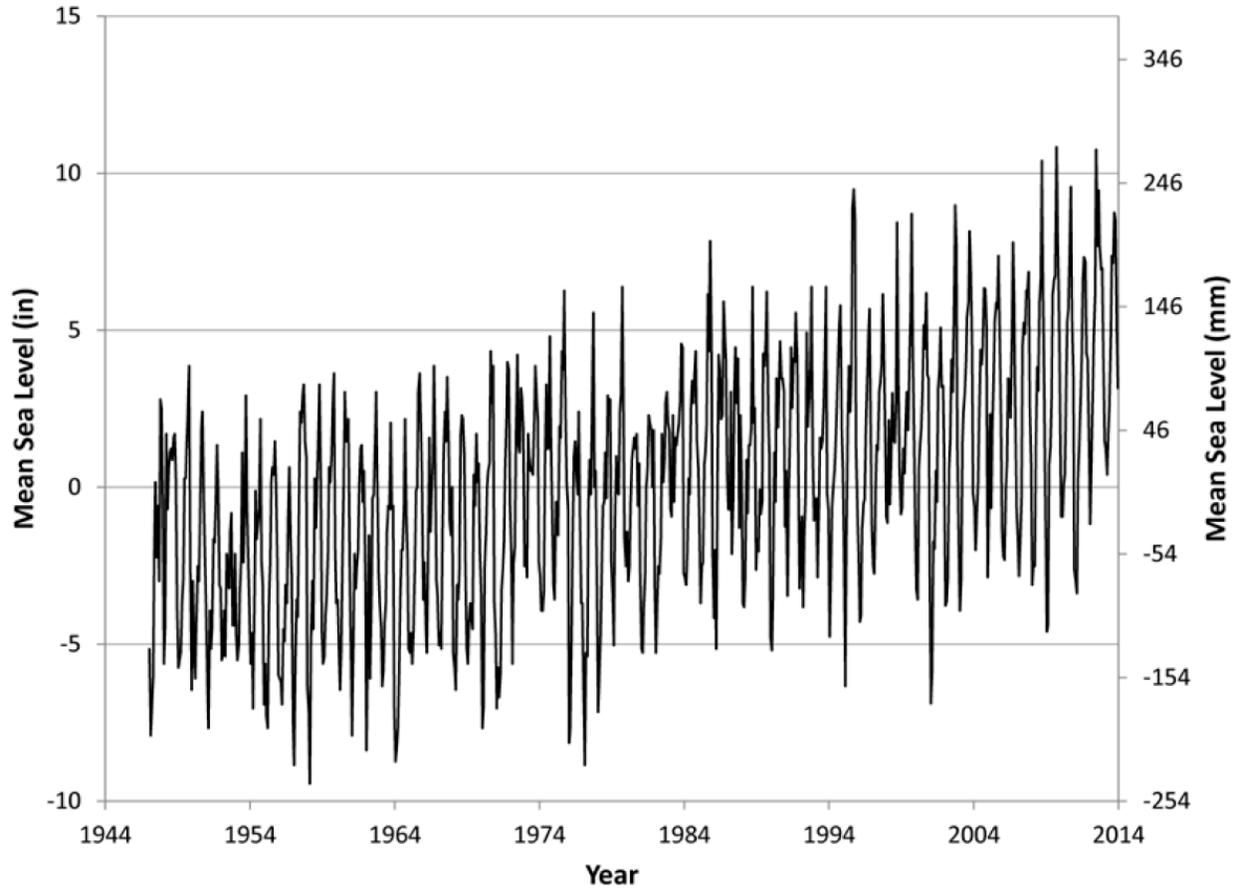
NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150413

Map of predicted acoustic impact levels in the park and the surrounding area for an average summer day. The color scale indicates how much man-made noise increases the sound level (in A-weighted decibels, or dBA), with 270 meter resolution. Black or dark blue colors indicate low impacts while yellow or white colors indicate greater impacts. Note that this graphic may not reflect recent localized changes such as new access roads or development.

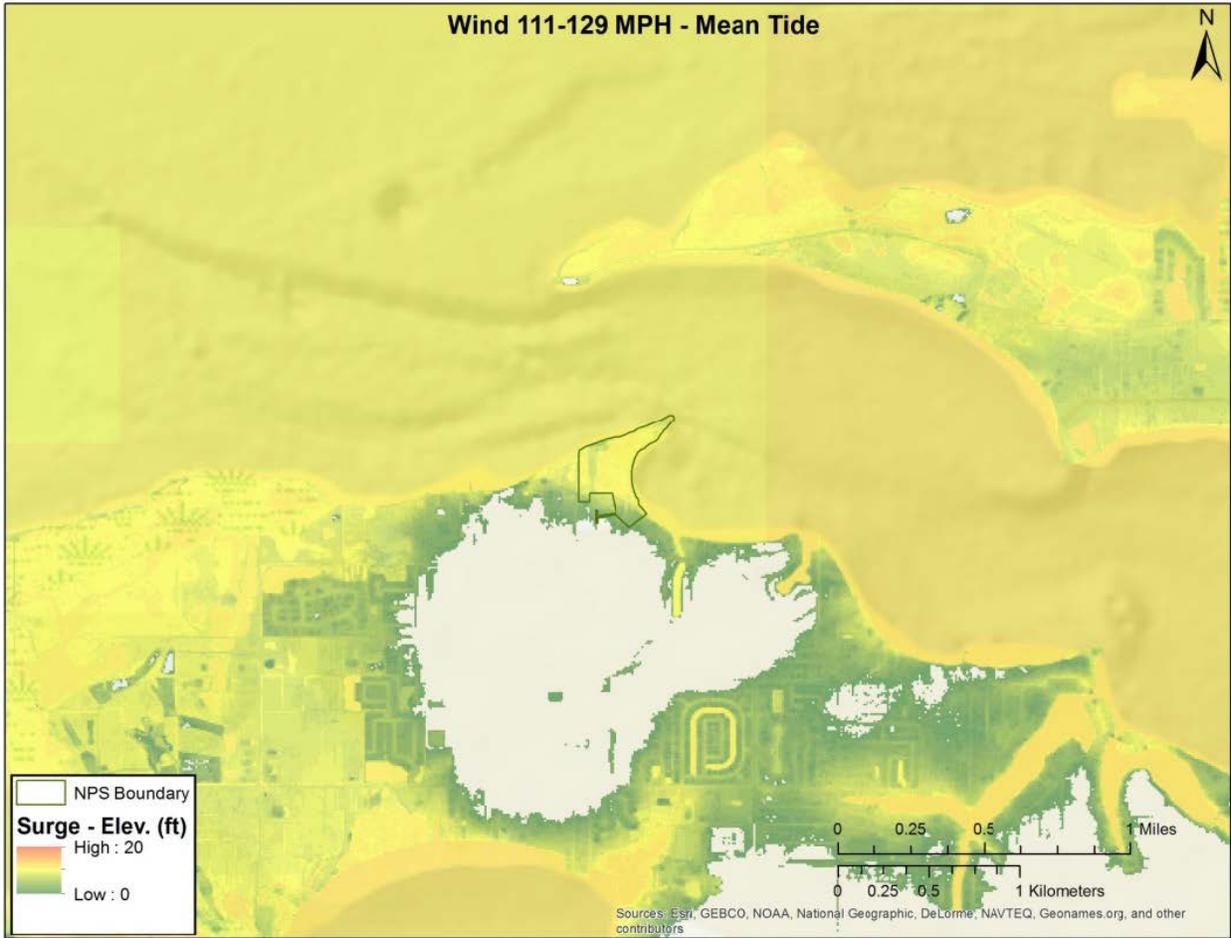
Resource Brief: Sea Level Rise and Storm Surge at DESO

Sea level rise and associated increases in storm surge impact coastal areas and require parks to revise management goals and strategies. Historical data from the St. Petersburg, FL tide gauge show that sea level around De Soto National Memorial (DESO) has risen 6.6 inches over the past 66 years (IPCC 2013, NOAA tides and currents 2012, Shown Below). DESO has not been directly in the path of any hurricane-strength storms over the last century; however, approximately 9 hurricanes have passed within 10 miles of the park since 1842. Storms are expected to intensify over the next century. At least one Saffir-Simpson category 4 hurricane should be expected to travel up to DESO by 2100. Under current sea level, a category 4 hurricane would cause a storm surge height of over 14 feet at the park.

Part of the Park is covered by a mangrove ecosystem that, due to its proximity to the water, could change with gradual sea level rise and saltwater intrusion. Drought and the availability of fresh water could be a factor in the health of the mangrove as climate change unfolds (Osland et al. 2014).



Sea level trends, St. Petersburg tide gauge, 1947–2014 (from Caffrey 2015)



Potential storm surge height and extent of a Saffir-Simpson category 4 hurricane striking during mean tide and current mean sea level. Park boundary shown above represents DESO area, as well as the adjoining County Park.

2.2. Cultural Resources

Archeological Resources  web ▶			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the relationship of the park’s archeological resources to the historic contexts for the park.		Yes. Context for the archeological collections is provided in two key reports: “De Soto National Memorial Archeological Overview and Assessment” by Margo Schwadron (1998); “Archeological Investigation of De Soto National Memorial” by Margo Schwadron (2002). The National Register nomination for the Shaw’s Point Archeological District (NR #001000342), completed in 2001 also provides detailed context and evaluation of significance for the prehistoric and historic archeological resources.
	Scope of archeological resources in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		Yes. Information is provided in the “De Soto National Memorial Archeological Overview and Assessment” by Margo Schwadron (1998) and “Archeological Investigation of De Soto National Memorial” by Margo Schwadron (2002). The prehistoric and historic archeological sites have been determined to be other important resources.
Inventory	Percentage of park intensively surveyed.		13.1% is intensively surveyed based on information in the SER cultural resource GIS database. Any unidentified resources in those unsurveyed areas are at risk from sea level rise.
	Percentage of archeological resources with complete, accurate, and reliable State site forms.		0%. The entire park has an existing site form that has not been updated since 1991. All sites, however, were included in the 2001 National Register nomination and the information is readily accessible to the SHPO and NPS staff and updating the forms is not a high priority. State of Florida has a Sunshine Law, which means access to sensitive archeological site information cannot be prevented, and therefore not all state site forms are updated.
Documentation	Percentage of known sites with adequate National Register documentation.		100% of 19 known sites are documented as part of the Shaw’s Point Archeological District National Register nomination.
	Research results are disseminated to park managers, planners, interpreters, and other NPS specialists and incorporated into appropriate park planning documents.		Yes. Research results inform resource management decisions, are utilized in park planning documents, and are incorporated into interpretation.

Archeological Resources (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Certified Condition	Percentage of archeological resources certified as complete, accurate, and reliable in the Archeological Sites Management Information System (ASMIS) in good condition.		95% of park's 19 archeological sites and sub-sites are in good condition (currently 100% in ASMIS). The recommendation for Tabby House Ruins is to re-evaluate condition in conjunction with the SER archeologists and LCS staff. Recent efforts by the park to protect the ruins may contribute to preservation of the site.

Cultural Anthropology



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the relationship of the park's ethnographic resources to the historic context(s) for the park.		No. An ethnographic overview and assessment has not been completed for De Soto. The park would benefit from a cultural anthropology perspective with respect to further research and interpretation of its other significant resources such as the William Shaw "tabby house." Areas for additional research to better understand multi-cultural perspectives include possible connections to: the Underground Railroad; historic black community of Angola; Cuban fishing ranchos; and historic Native American tribes, such as the Seminole Indians.
Inventory	Appropriate studies and consultations document resources and uses, traditionally associated people, and other affected groups, and cultural affiliations.		No. The park is in need of identifying traditionally associated people and other affected groups. Tribal consultation is one key requirement to identify Native American interests and culturally affiliated tribes.

Cultural Landscapes



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research exists to understand the relationship of the park's cultural landscapes to the historic context(s) for the park.		No. The relationship of the park's historic contexts and cultural landscapes is not fully addressed in the existing National Register nomination, and no comprehensive study of the cultural landscape has been completed. A cultural landscape report (CLR) began in 2015. This document will better illustrate the historic context and cultural landscape connection.
	Scope of cultural landscapes in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		No. The DESO Foundation Document lists one cultural landscape feature (Granite monument dedicated in 1939 in the 400th anniversary of de Soto's landing in Florida) as a fundamental resource. It also lists the William H. Shaw tabby house ruins and prehistoric shell middens in the category of "other important resources and values." With the completion of the CLR, the park will have an understanding of its cultural landscape(s).
	Adequate research exists to document and preserve the cultural landscape's physical attributes, biotic systems, and uses when those uses contribute to historical significance.		No. Upon completion of the CLR, the park will have adequate documentation to preserve the cultural landscape.
Inventory	Percentage of landscapes eligible for the National Register in the Cultural Landscapes Inventory (CLI) with certified complete, accurate, and reliable data.		0%. A CLI for the park has not been completed. A CLI can be undertaken with the documentation from the CLR.
Documentation	Percentage of cultural landscapes with adequate National Register documentation.		0%. The park's cultural landscape is not adequately documented in the 1961 National Register nomination and 1976 update.
Certified Condition	Percentage of cultural landscapes certified as complete, accurate, and reliable in the Cultural Landscapes Inventory (CLI) in good condition.		0%. A CLI for the park has not been completed. A CLI can be undertaken with the documentation from the CLR.

Cultural Landscapes (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Certified Condition (continued)	Percentage of Maintained Landscapes (historic) in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.		0%. A CLI for the park has not been completed. A CLI can be undertaken with the documentation from the CLR.

Historic Structures



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Historic Structures are identified and evaluated using historical contexts.		50%. Two historic structures are currently identified in the park: the 400th anniversary monument and the Tabby House Ruins. The tabby house ruin is listed on the National Register of Historic Places. Both structures are listed in the park's List of Classified Structures (LCS). A determination of eligibility for the National Register of Historic Places is needed for the park's Mission 66 visitor center.
	Adequate research exists to document and preserve the historic structure's physical attributes that contribute to historical significance.		No. The park is in the process of preparing a cultural landscape report. The significance and the existing condition of William H. Shaw tabby house could be elaborated in this report. A determination of eligibility for the National Register of Historic Places is needed for the park's Mission 66 visitor center.
Inventory	Percentage of historic structures eligible for the National Register in the List of Classified Structures (LCS) with accurate, complete, and reliable data.		100%. The Tabby House Ruins and the Colonial Dames of America 400th anniversary monument are listed on the National Register and are in the LCS.
Documentation	Percentage of historic structures with adequate National Register documentation.		33%. The Mission 66 visitor center has not yet had a determination of eligibility completed and therefore does not have adequate NR documentation.

Historic Structures (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Documentation (continued)	Research results are disseminated to park managers, planners, interpreters, and other NPS specialists and incorporated into appropriate park planning documents.		Yes. The Tabby House Ruins information is disseminated.
Certified Condition	Percentage of historic structures certified as complete, accurate, and reliable in the List of Classified Structures (LCS) in good condition.		As of 2012 LCS data, 50% of the structures are in good condition. The 400th anniversary monument is listed in good condition. The Tabby House Ruins are in poor condition.
	Percentage of historic structures in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.		0%. There are no separate FCI numbers for monument or Tabby House Ruins. The recommendation is that each receives its own entry in FMSS as a structure. Currently, the monument is tied to the maintained landscape location and that FCI is 0. The Tabby House Ruins is tied to the DESO nature trail and that FCI is 0.44.

History



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the national significance and historical contexts for the park.		Yes. There is a large body of research related to De Soto's expedition and its impacts, as well as the primary source documentation. Additional site-specific information may be obtained through preparation of a historic resource study. Areas for further research might include the Underground Railroad; historic black community of Angola; Cuban fishing ranchos; and historic Native American tribes, such as the Seminole Indians. The park also lacks a comprehensive Administrative History.
	Research at the appropriate level of investigation (exhaustive, thorough, or limited) precedes planning decisions involving cultural resources.		Yes. Research is incorporated into multiple park planning efforts, including Foundation Document, State of the Park, and Section 106 compliance. Additional research to inform cultural landscape decision is underway with the 2015 CLR project.
	Research is conducted by qualified scholars.		Yes. Work is conducted by professional NPS staff or contractors who are qualified in their various fields.
Inventory	Cultural resources are inventoried and evaluated in consultation with State Historic Preservation Officers (SHPOs).		Yes. Consultation with the SHPO occurred as part of determinations of eligibility for the National Register. One DOE is still needed (Mission 66 visitor center).
Documentation	Percentage of historic properties with adequate National Register documentation.		90%. The 19 archeological sites have adequate documentation (in the Shaw's Point Archeological District nomination). The Mission 66 visitor center has not yet had a determination of eligibility completed and therefore does not have adequate NR documentation.

Museum Collections



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p>Knowledge</p>	<p>Sufficient research and analysis exists to understand the relationship of the park’s museum collection to the historic context(s) for the park.</p>		<p>Yes. The history of park establishment, management, and resources (including the museum collection) is documented in the park’s administrative history “Small Park, Large Issues: De Soto National Memorial and the Commemoration of a Difficult History” by David and Anne Whisenant (2007).</p> <p>Context for the archeological collections is provided in two key reports: “De Soto National Memorial Archeological Overview and Assessment” by Margo Schwadron (1998); “Archeological Investigation of De Soto National Memorial” by Margo Schwadron (2002).</p> <p>In 2010, the park’s 16th-century objects were researched and documented as part of an appraisal process. The summary appraisal report (without valuations) provides detailed descriptions of the objects, including significant provenance information regarding the Maximilian suit of armor.</p> <p>Plant and vertebrate inventories provide context for natural science collections. Species lists exist for plants, birds, mammals, reptiles, amphibians, and fish. No comprehensive invertebrate inventory has been completed, although some information regarding butterflies exists for the park. There are no records in NPSpecies for the park.</p>
	<p>Scope of museum collection in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.</p>		<p>With off-site storage for the collection and staffing changes at the park, local knowledge about the scope of the collection has been reduced over time. Documents available to increase staff understanding of the scope of the museum collection and its relationship to other park resources include: scope of collection statement; summary appraisal report (without valuations) for the 16th-century artifacts; administrative history; archeological overview and assessment; archeological investigation report; and the finding aid to the park’s resource management records collection.</p> <p>Efforts to increase access to collections are ongoing. Some collections are accessible through the NPS Web Catalog. In addition, all digital images of museum objects that currently exist have been provided to the park (as of March 2015). In addition, a 2015 microfilming/ scanning project will provide park staff and researchers with digital copies of the archives, including the historic photograph collection.</p> <p>Although the 2015 Foundation Document for DESO identifies the museum collection as an “other important resource or value,” the museum and archival collections are fundamental resources for the park. The archeological artifacts, archives, and other collections document park resources and inform resource management decisions.</p>

Museum Collections (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p>Inventory</p>	<p>Percentage of existing collection that is accessioned and cataloged.</p>		<p>87.16%. Museum collections are accessioned upon receipt. Funded cataloging efforts in FY 2015 will further increase the percentage of the collection that is cataloged.</p> <p>Based on the FY 2014 collection management report (CMR), DESO's museum collection is estimated at 167,613 objects, specimens, and archival documents. The largest component of the collection is the museum archives (93,481 documents), which consists predominantly of resource management records and photographs. Archeological objects are the second largest component with 74,033 artifacts from prehistoric shell middens and shell ridges, historic artifacts from the Tabby Ruins, and surface collected material. Although small, the park's collection of history objects includes significant examples of 16th-century armor and weapons. A mural by Dan Feaser is the highlight of the park's small art collection. The natural science collection consists of a small herbarium and two biological specimens.</p>
	<p>Scope of Collection is consistently implemented; items or objects are researched to determine their appropriateness for inclusion in the museum/archive collection.</p>		<p>Yes. Scope of Collection Statement was approved on 11/3/2011. The SOCS guides collection acquisition; collections which fall outside the SOCS are not accessioned.</p>
<p>Documentation</p>	<p>Accession and deaccession files are complete with all appropriate signatures.</p>		<p>Yes. In 2011, all accession files were reviewed for completeness of documentation. Attempts were made to track down older, missing paperwork. Memos to file were prepared to document missing information. All new accessions are created with appropriate paperwork and signatures. The park's first deaccession was created in 2015 and all required forms were completed with appropriate signatures.</p>
	<p>Park has current and appropriate baseline documentation (scope of collection statement, collection management plan, housekeeping plan, EOP, security and fire safety plans, conservation plans, etc.)</p>		<p>The park's scope of collection statement was approved on 11/3/2011 and is current. The collection management plan is outdated but will be updated as part of the South Florida parks CMP update in 2017. Documentation completed within the past few years includes: a museum security and fire protection survey; museum emergency operations plan; appraisal of 16th-century artifacts; and museum integrated pest management plan is in preparation in 2015. Project proposals have been submitted for other needed baseline documentation.</p>

Museum Collections (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p>Condition</p>	<p>Overall condition of the collection based on condition survey and improvements to storage and exhibit facilities.</p>		<p>The majority of the collection is in stable condition. Inherently unstable formats in the archives (such as thermofax, newsprint, color images, etc.) have been addressed through reformatting or cold storage, as appropriate. Digital archives have been migrated to a server, are routinely backed up, and are being cataloged in 2015. The Feaser mural is unstable and will receive additional treatment in 2015. A project proposal has been created for a collection condition survey of the collection on exhibit.</p> <p>The park has on-site exhibits in the visitor center. Improvements to the exhibits have included renovation of the space, new exhibit cases, and installation of a system to control relative humidity. As of FY 2014, the park meets 85.75% of museum collection preservation and protection (MCPPT) standards.</p>
<p>Certified Condition</p>	<p>Percentage of museum collection storage facilities in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.</p>		<p>100%. The visitor center FCI is 0.017, which reflects good condition. In addition, the park's museum collections are managed by the South Florida Collections Management Center (SFCMC) at Everglades National Park (EVER). DESO collections are stored in two facilities at EVER: Daniel Beard Center (FCI of 0.061) and the Robertson Building (FCI of 0.0219). Both FCI's indicate that those facilities are in good condition.</p>

Resource Brief: Maximilian Suit of Armor



Six views of Maximilian armor (Photo by Paul Golubovs)

This composite German suit of Maximilian armor (DESO 89) was made between 1515 and 1580, with alterations made 1924–1937. Many suits of armor are composite, having been assembled by armorers from components made in different places and at different times. In some cases, mismatched pieces were reworked to adjust their size or to match decorative motifs. In other instances, new pieces were fabricated to match missing older pieces so that a complete suit can be assembled. All of these common traits are found in DESO's armor. The close helmet (1515–1520) has been traced through four auction sales since 1876 prior to becoming part of this suit. Several pieces are marked indicating they were made in the city of Nuremberg but others are unmarked. Armorer Raymond Bartel assembled this suit for collector Carl Otto Kretzschmar von Kienbusch and in the process modified original pieces and replicated others. Bartel added a culet of three lames to the original German backplate (c. 1520–1530) sometime between 1924 and 1937. Aspects of the arm and leg defenses have been altered and original pieces copied to provide matching pairs.

Although this suit was never worn by Hernando de Soto or his men, it represents some of the armor elements available to conquistadors at the time of De Soto's expedition in 1539. De Soto's army of soldiers, hired mercenaries, craftsmen, and clergy made landfall at Tampa Bay in what is now Florida. During their four-year, four-thousand-mile quest for gold and glory, they met with fierce resistance from indigenous people protecting their homelands. De Soto's odyssey was one of intrigue, warfare, disease, and discovery. Disease and warfare brought to the New World by De Soto and other explorers had devastating consequences for Native Americans.

2.3. Visitor Experience

Visitor Numbers and Visitor Satisfaction

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Number of Visitors	Number of visitors per year		Park visitation has maintained relatively constant over the last five years with some fluctuation. Between FY 2012 and 2013 there was 56,166 more visitors total visitation totals for five years were 731,166 with a yearly average of 146,233.
Visitor Satisfaction	Percent of visitors who were satisfied with their visit		Based on the standard visitor satisfaction survey conducted each year, the percentage of visitors satisfied in FY13 was 99.0%, which is fairly consistent with the previous five and ten year averages (99.6% and 99.3%, respectively).

Interpretive and Education Programs – Talks, Tours, and Special Events



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Education Programs: Parks in Classroom (PIC)	Number of programs and participants		PICs are in-class field trips for elementary-based curriculum. Programs feature European and native cultural, environmental and conservation, and America's National Parks education. The number of PICs has gone down compared to previous years; however, there are challenges with cooperation from the local community and school boards. The PIC program has averaged 1,800 students a year with a total of 9,300 students experiencing the program, which was offered 110 times.
Ranger Talks and Living History Programs	Number and quality of programs and attendance		Living history programming takes place seasonally between December and April. Park staff presents six hourly programs daily that depict the European and Native American experiences during the De Soto expedition. Each program concludes with a historic weapons demonstration featuring the native longbow and the matchlock musket. Park rangers are encouraged to develop and customize their own programs and increase the number of programs that are given each day. Interpretive themes have also been expanded to present a more comprehensive view of the park's historical story. The park's historic weapons program has consistently been one of the top five programs within the Southeast region. An average of 7,649 people experience the park's living history talks annually, with 8,951 enjoying the park's historic weapons demonstrations.

Interpretive and Education Programs – Talks, Tours, and Special Events (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Ranger-Guided Trail Walks	Number of participants		Throughout the year, park staff leads visitors along the park nature trails. A 45-minute guided tour details the park's unique ecosystem, natural features, and history. The number of visitors taking advantage of this service has decreased as, due to staffing limitations, the tours are available only by request. Numbers dropped between 554 participants in FY13 to 171 participants in FY14.
Special Tours: Kayak Tour	Number of participants Variety of tours		Throughout the summer season between May and November, Park staff leads a visitor kayak tour along the park's shoreline. Each tour discusses the historic use of Florida's waters by both the indigenous people and the Spanish explorers. Conservation and ecology are underlying themes in every tour. This is the first history-based park that offers an all-inclusive program of its kind free of charge to the public. Response has been overwhelming with programs filling up one to two months in advance. This program has had 2,216 visitors over a five-year period with the program being offered 245 times.
Junior Ranger Programs	Number of books handed out and junior rangers sworn in Number of participants		<p>14-page book featuring history and park-based activities. Junior Rangers learn about the Europeans and the Native people, as well as their National Parks. Junior Rangers are given pencils and compasses to complete the book and earn their badges. Unveiled in 2010, this award-winning book (by National Association of Interpretation) has had an overwhelming positive effect on youth understanding of this park's mission. This book is now used as part of the local education curriculum of local school systems and includes many of the local Florida Sunshine State Education standards.</p> <p>A free one-week summer camp features a new theme every day. Themes range from conservation, ecology, archeology, and history. Also unveiled during the 2010 season, these camp programs have given many local children a unique and immersive experience in the NPS, science, and history. The program has expanded from eight days to two one-week sessions and from 30 kids to 60 kids over a two-week period.</p>
Special Events	Number of events and attendance		DESO has six major events a year. This has increased from one event, the Landing event, to five additional events in the past five years. Current events include De Soto Landing Reenactment, Desoween, Winter Luminary, Concerts on the Lawn, Dog Days of DESO, and Five Centuries of Florida History. By adding these special events to the park's calendar, community outreach and attendance has increased significantly in some cases with winter luminary pulling in 2,000 visitors in two hours after normal operating hours.

Interpretive and Education Programs – Talks, Tours, and Special Events (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Special Events: Desoween	Attendance and scope Visitor satisfaction		This spooky experience has an educational and historical motif as a haunted trail walk experience. It is traditionally held the Saturday before Halloween. Over the last five years, the scope of the event has increased from four stations employing four staff and volunteers, to now utilizing all available staff and volunteers. The event has had a steady increase in visitation: from 70 visitors to well over 800. In October 2013 the event was cancelled due to government shutdown; public response was overwhelming—the event was sorely missed.
Special Events: Winter Luminary	Attendance and visitor satisfaction		This annual evening event lights the park’s trails with thousands of glowing lights. Musical guests are chosen that highlight the diverse cultures represented during the time of the De Soto Expedition. This is by far, the park’s most iconic event. There has been a solid increase in visitation every year and popularity among the local and social media outlets. In recent years, the event topped upwards of 2,500 people during a two-hour event. However, due to this increase, the park has reached carrying capacity for this event within the past two years. Community transport has also been provided within the past few years to alleviate some of the park’s carrying limitations.
Special Events: De Soto Landing Event	Visitor experience and attendance		The traditional landing event is a recreation of Hernando de Soto landing of 1539. Park staff and volunteers portray members of the expedition. Afterwards demonstrations and talks are given about the impact the expedition had on the American Indian societies of the American South. Over the last three years, the landing has increased from once a day to twice a day due to increasing popularity. Attendance has increased due to adding the extra event. Media coverage has increased in the past three years. This reenactment is part of the local community’s culture, having been conducted by various agencies annually since 1939.
Public Outreach/ Off site Events/ Community Events	Number of events Number of contacts		Over the last five years De Soto National Memorial has increased its community footprint by opening informational booths at major community festivals and events. Through the park’s partnerships with the Friends group and Keep Manatee Beautiful, the park has spread the word about its events and programs at events such as: Taste of Manatee, Anna Maria Island Historical Society, Palma Sola Botanical Gardens, Cortez Commercial Fishing Festival, Manatee Seafood Festival, De Soto Heritage Parade, Canine Christmas, and Civilian Conservation Corps Celebration Event at Highland Hammocks. Total community outreach was 271,519 visitor contacts with an average of 54,303 a year.

Resource Brief: Ranger Led Kayak Tours



Park ranger leading a kayak tour with the Cross Monument in the background.

The Ranger led kayak tour was a program established in 2010. The park purchased six kayaks and equipment. The purpose of the program is to expose visitors to a different side of the park, one not previously available to the majority of visitors. The tour gives many the opportunities to consider DESO's interpretive themes from a unique vantage point. The theme of this program is to illustrate Florida's long history and integral connection with its water resources. The native people used this ecosystem as a primary source of food, transportation, and commerce; the Europeans used this resource as their means of transportation to the new world. During the course of the tour the Rangers lead visitors from a historical to an ecological standpoint in how they can participate in protecting this valuable resource.

Over 400 visitors a year participate in this program, exposing many for the first time to kayaking and water ecology. Programs fill quickly and reservations are usually full up to two months in advance. This Ranger led kayak tour only runs during the summer months.

Resource Brief: De Soto Landing Reenactment Event

This event has been held in the park since 1939. This recreation of the De Soto landing event has undergone many changes and interpretation in its many years. Originally held by the De Soto Historical society, their members hosted the event in a festive atmosphere. In the early 1990s due to Native American protest, the park took over the planning and execution of the event. Now the De Soto landing recreates the landing of Hernando de Soto in Tampa Bay with period accurate clothing and ceremony. Interpreters now tell of the European experience of coming to the new world and its impact on the tribal societies of the American Southeast. Currently the landing is held before the last weekend in April, signifying the end of the park's living history season. Two landings occur on the day to better accommodate visitor time and attendance.



Staff and volunteers dressed in 16th-century period clothing depicting the Landing reenactment with the Spanish replica longboat.

Interpretive Media – Brochures, Exhibits, Signs, and Website



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Wayside Signs	Condition of signs		The content on the waysides has not been recently changed. Maintenance of waysides needs improvement. Over the last year, there has been a concerted effort to replace and improve the signs. One new interpretive area was added and two existing interpretive areas were improved within the park.
Park Directional Signs (off-site)	Usefulness, quantity, and placement		DOT has replaced all existing signage within the past 3 years (VIVA 500 in 2012, Florida's celebration of 500 year anniversary of Ponce de Leon's claim of discovery).
Museum Exhibit	Attendance		The park's theater was converted into a multipurpose room, including a museum space in 2010. Light and temperature sensitive exhibits and artifacts were moved from the Visitor Center lobby into the museum. Several display cases were installed. Over the last five years, several rotating exhibits have been showcased in the museum. These include Native American artwork and replica artifacts by the artist, Hermann Trappman, cultural items from the Chickasaw Nation, and historical artifacts from the South Florida Museum.
Lobby Exhibits	Condition and visitor experience / presentation		Two exhibits were removed. There has been no improvement to the remaining exhibits in recent years. The interpretive panels are outdated in appearance and deteriorating in condition.
Tabby House Exhibit	Visitor experience		Up until 2014, the Tabby House had no barrier to the public, opening the resource up to further deterioration and vandalism. A barrier that allows the public to view the area without being intrusive, has since been added, and has increased interest in the Tabby House.
Granite Monument	Condition		The Granite De Soto Trail Monument was placed in 1939. The Monument is in good condition.
Camp Uzita (and related chickees)	Visitor experience		Camp Uzita is the location of most of the park's living history programs. Park staff utilizes the 1539 ambience as a backdrop of the talks and programs. Over the last five years the chickee huts in this area have been re-thatched several times and a new roof was placed on the forge area. The palisade structures are in need of repair.
Shell Midden Viewing Area	Visitor experience		Opened to the public in 2012, the Shell Midden has given the public access to one of the park's Native American cultural sites. New interpretive signs are needed to highlight this feature's significance as related to the park's mission and interpretive themes.

Interpretive Media – Brochures, Exhibits, Signs, and Website (continued)

[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Print Media	Accuracy and availability of primary park publications		<p>The bulk of the park’s print media, including handouts, brochures, trail maps, fact sheets, Jr. Ranger book, etc., are accurate and relevant.</p> <p>The main park brochure needs revision and updating.</p>
	Orientation Films De Soto in America		The park film was released in 2002. The film still receives positive feedback. However, it could be edited or produced to be shorter, more engaging, and higher resolution. The park video is also now available for purchase and/or distribution.
Audio-visual Media	Other AV material		The amount of AV material has increased, including the number of TVs, collection of related DVDs, slideshow presented programs showing park events and activities.
	Currency and scope of website; number of website visitors		The NPS has gone through two versions in the past five years, and the core information hasn’t changed. The website is updated several times a month with park news and events and has received 17,867 monthly pageviews.
Websites	De Soto National Memorial Facebook Page		The park Facebook page shares information about the park’s events and programs, as well as historical milestones in the park’s mission. The site is updated at least every two days. The site has 830 likes and an average of 600 visits a week.

Accessibility



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Mobility	ADA compliance		Up until 2013, it was a concern of the park to make the trails and waysides to be more compliant with ADA standards. Improvements to the boardwalk and the trails by adding gradual incline grades to elevated surfaces have improved wheelchair access. The addition of ADA accessible picnic tables has increased the amenities available to the mobility impaired.
Visual and Auditory Accommodation	ADA compliance		Up until 2013, the park has make improvements to the film to be more compliant with ADA visual and auditory impairments. Size of text in the museum has been increased to become ADA compliant. A new Closed Caption device was installed for use with the park movie to accommodate hearing impaired visitors.
Multilingual Resources	Number of audio and print materials in multiple languages		The park film has closed captions available in Spanish. The park has identified a need to better translate existing media into other languages and is in progress of adding translated media to our library.

Safety



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Visitor Safety	Recordable incidents		The safety of visitors is a park priority. The park works to quickly identify and mitigate potential hazards, and despite high attendance at park events, the number of accidents is very low. Partnerships with local first responders have been established and measures have been made to prevent further incidences.
Staff Safety and Training	Number of staff trained		Operational Leadership Training has been completed by majority of park staff. CPR, First Aid, and AED training are offered to staff and volunteers on a space-available basis. Job Hazard Analysis is conducted before jobs throughout the park. Regular safety messages are given and distributed to staff members.

Partnerships



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Volunteers	Number and hours contributed		<p>The volunteer program has been growing significantly over the past several years. Volunteer hours have steadily increased to above 10,000 hours per year, including the Youth Advisory Council (YAC), a high school advisory body that allows local teens to volunteer and experience the park and advise rangers on park programs, and resident volunteers (RV VIP). The volunteer program provides essential assistance in the Visitor Center, living history camp (Camp Uzita), kayak tours, and the numerous special events throughout the year.</p>
Partnerships	Number of official and unofficial partnerships		<p>Over the last five years, we have engaged in over 35 formal and informal partnerships. Many of these partnerships have helped fund park projects and events, while others have aided the park in increasing its community footprint.</p> <p>Friends of De Soto National Memorial is the park’s main partner and philanthropic arm.</p> <p>Other partnerships include organizations such as: Department of Natural Resources of Manatee County, West Manatee Fire District, Keep Manatee Beautiful, Hernando De Soto Historical Society, Chamber of Commerce, South Florida Museum, University of South Florida, Florida Bureau of Archaeological Resources, Mission Nuestra Senora de La Leche, De Soto Trail of 1539 Waysides (30+ state, county, city, private, and federal agencies/groups).</p>

Resource Brief: De Soto Trail Monument

This solid granite monument was dedicated on the property that would become De Soto National Memorial back in 1939 by the Society of Colonial Dames. This monument's purpose was to commemorate the 400th anniversary of the landing of Hernando de Soto in Tampa Bay. The placement of this monument was instrumental in the establishment of the park at Shaw's point. Built on top of a native shell mound the monument has become the center point for the park. Surrounded by the park's Historic Gumbo Limbos, its status as sentinel has gone mostly unchanged over the decades. The park monitors the monument for cracks, vandalism, and the effects of pollution and weathering.



The National Society of the Colonial Dames of America dedicated the monument in 1939 during the 400th Anniversary commemorating the landfall of De Soto's expedition.

Resource Brief: Camp Uzita and Living History Programs

This replica village is made up of several traditional Native American chickee huts, made from palm frond thatching on a pine framework. The park's interpreters use the camp during the winter months to present living history programs about the De Soto expedition of 1539. Program topics are diverse, and may include topics like European and Native American cultures, introduction of invasive and exotic species, or the devastation of European diseases on the native populations. Park staff displays replica items, and allows visitors to experience part of history by trying on period clothing, armor, and holding period tools and weaponry. Park Staff and volunteers dress in 16th-century period clothing as people from the De Soto expedition.

Throughout the season interpreters will demonstrate historic weapons, blacksmithing, cooking, and other activities associated with the time period. A dugout canoe allows park staff and volunteers to demonstrate how to make a traditional Native American dugout boat from a pine trunk using tradition native tools made of wood and shell. An example of a completed dugout made in the same chipping and burning method is on display.

Camp Uzita gives the visitor a sense of place and time in relation to the struggle that occurred in early American history almost 500 years ago. The camp also serves as a backdrop for the Junior Ranger Summer camps where children ages 6–11 are immersed in Florida's rich history. Camp Uzita serves as a source of visitor contact, destination, photo opportunity, education, and reflection. This unique corner of the park serves so many different roles and is integral in the way De Soto National Memorial accomplishes its mission.



Clockwise from top left: Park ranger dressed in 16th-century period clothing giving an interpretive program in Camp Uzita seating area; Park ranger and volunteer in progress of demonstrating the burn-and-chip method of creating a dugout canoe; A ranger dressed in 16th-century period clothing operating the bellows in the forge area of the Camp Uzita; A volunteer dressed in 16th-century period clothing demonstrating traditional cooking methods over an open fire in Camp Uzita.

Resource Brief: Special Events a Local Favorite

Throughout the year De Soto National Memorial holds several after-hours community events. Created over the last several years these events have become a center piece for the local community and a tradition for many. Reception of these events is overwhelming with attendance levels and volunteer support reaching record levels year after year.

Starting out six years ago, the Halloween-themed *Desoween* began as a small night hike with storytelling stations along the trails. *Desoween* has grown into a haunted trail experience with hundreds of visitors. This event employs over 40 volunteers and park staff who play a variety of roles. The stations on the trail feature historical and mythological people, animals, and monsters from local history and myth. The event staff may be dressed as ghostly conquistadors, pirates, lost tourists, wayward soldiers, or the frightful Sisters of the Swamp. Every year the stations and the themes of the trail change to keep the event new and exciting for the visitors who now make this part of their annual fall traditions. Though the trail has a spooky and scary connotation, it is designed to be family friendly. Attendance for *Desoween* has grown from only 70 visitors in attendance in 2009 to over 820 in 2012. In 2013 due to Federal shutdown, *Desoween* was not held and community response to this events cancellation was overwhelming. *Desoween's* return in 2014 pulled in 665 visitors in a two hour period.

The largest and most popular of the park's special events is the Winter Luminary. Held in mid-December, this event became a way to commemorate the unique cultures of the 16th century during the holiday season. The Winter Luminary features several musical stages featuring European, Native American, and Caribbean artists. The park's trails are lined with thousands of glowing lights. In 2011 the park opened the event to local high schools and began featuring orchestras and ensembles. The event features a living history component with a replica of Hernando de Soto's winter encampment, where park interpreters tell the story of the European and native cultures and the way they commemorate the winter season. The theme of this program shows visitors that even though both cultures were very different, they shared many of the same traditions, centered on the village and family. This event has expanded over the years from utilizing a quarter of the park's trail to now encompassing the entire half mile river trail. This event has reached the park's safe carrying capacity of 2,500 visitors in two hours. Community partnerships now supply amenities like food vendors and shuttle busses for the event.



De Soto Volunteer and YAC President Emily Waikem portrays one of the Sisters of the Swamp during the park's Desoween Event. She is dressed in flowing white gown and fright make-up. She appears out of the dark and lures her victims into the swamp.



De Soto National Memorial's boardwalk is decorated with electric string lights for the annual Winter Luminary event. Also visible are the bag luminaries and torches laminating one of the park's Native American Interpretive displays. The winter Luminary is held mid-December and draws 2,000 visitors into the park.

2.4. Park Infrastructure

Overall Facility Condition Index



[web](#) ▶

The National Park Service uses a facility condition index (FCI) to indicate the condition of its facilities and infrastructure. FCI is the cost of repairing an asset, such as a building, road, trail, or water system, divided by the cost of replacing it. The lower the FCI number, the better the condition of the asset. The condition of the buildings and other infrastructure assets at each park is determined by regular facility inspections, or “condition assessments,” including daily informal inspections and formal yearly inspections. Deficiencies identified from these assessments are documented in the NPS Facility Management Software System and the cost for each repair determined. Repairs that cannot be completed within the year count against the condition of a structure. The total cost of these deferred repairs divided by the total cost to replace the structure results in the FCI, with values between 0 and 1 (the lower the decimal number, the better the condition). The FCI is assigned a condition category of Good, Fair, Poor, or Serious based on industry and NPS standards. Deferred maintenance projects that require additional funding are identified based on FCI. Planned preventive maintenance on critical components occurs during the year, using a park’s base budget. For additional information about how park managers use information about the condition of facilities and infrastructure to make decisions about the efficient use of funding for maintenance and restoration activities at the park, [Click Here](#).

Asset Category	Number of Assets 2010 / 2015	FCI 2010 / 2015	Condition Status/Trend	Rationale
Buildings	4 / 4	0.033 / 0.026		The park made renovation to the Visitor Center restrooms, by replacing the old toilets and faucets with water efficient parts and supplies. Replaced roof on visitor center with an energy efficient TPO roof system. Installed new dual exterior water fountains at the Visitor Center. Upgraded electrical system throughout the park. Replaced the roofing system on Living History Camp buildings. Re-roofing of headquarters is approved for 2015.
Trails	1 / 1	0.054 / 0.056		The park added additional shell to existing trail system. The Park came up with a method of stabilizing a series of up-right posts without any excavation to the soil and constructed a protective/attractive rail type fence with handrail complete with mounted interpretive signs. Boardwalk maintenance is pending.
Paved Roads and Parking Areas	2 / 2	0.125 / 0.194		The parking lot was recently restriped and resurfaced. New signage was installed on road. The park does not feel that the FCI data for this category represents the actual condition that they see locally; therefore the park has modified this rating to reflect their professional view of the condition. This is an exception to the State of the Parks model.
All Others	10 / 10	0.008 / 0.006		The park installed a fire and smoke detection system with monitoring contact for Visitor Center. The Spanish Longboat vessel was stripped, cleaned, repainted, and varnished.

Resource Brief: De Soto National Memorial Visitor Center

Built in 1969 as part of the Mission 66 initiative, Mission 66 was a federally-sponsored program to improve deteriorated and dangerous conditions in the national parks, the result of a massive visitor boom after World War II. Mission 66 planners and architects developed the concept of the “visitor center” to streamline and standardize visitor services at federal parks nationwide. Approximately 100 new visitor centers were built during the ten-year program. Mission 66 visitor centers have been recognized by the National Register of Historic Places as significant historic structures and as important representatives of a new building type.

De Soto National Memorial’s Visitor Center is the primary visitor intake and interpretive contact station in the park. Here visitors immerse themselves in the journey of Hernando De Soto as they look at actual and replica artifacts that tell the story of the epic event. They watch the movie *Hernando de Soto in America* throughout the year and can see slides that showcase many of the park’s tours, events, and activities. Here visitors can receive valuable information from park staff and volunteers that aid in their understanding of De Soto’s 1539 expedition and its impact on American history.



Resource Brief: Green Parks Plan

The NPS manages the largest number of constructed assets of any civilian agency in the Federal Government. It operates more than 67,000 structures that account for more than 50 million square feet of constructed space such as visitor centers and historic structures. The [Green Parks Plan](#) (GPP) defines a collective vision and a long-term strategic plan for sustainable management of NPS operations. A critical component of the implementation of the GPP will be informing and engaging parks’ staff, visitors, and community partners about climate change and sustainability to broaden opportunities to foster change.

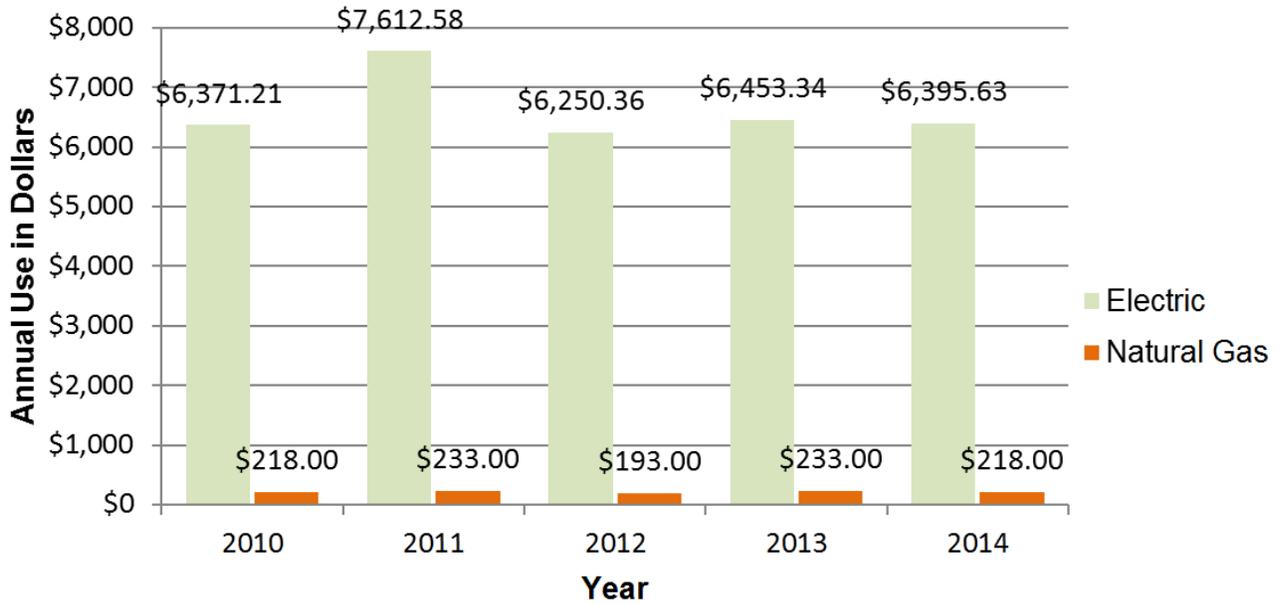
The Vision defined in the GPP plan is, “The NPS will preserve park resources unimpaired for the enjoyment of current and future generations by reducing its environmental impact through sustainable operations, design, decisions, and management at every level of the organization.” The plan is based on nine strategic goals that focus on the impact of facilities on the environment and human welfare. Two of those goals are closely aligned with Park Infrastructure as defined in this State of the Park report. Those are:

- Be Energy Smart: The NPS will improve facility energy performance and increase reliance on renewable energy; and
- Be Water Wise: The NPS will improve facility water use efficiency.

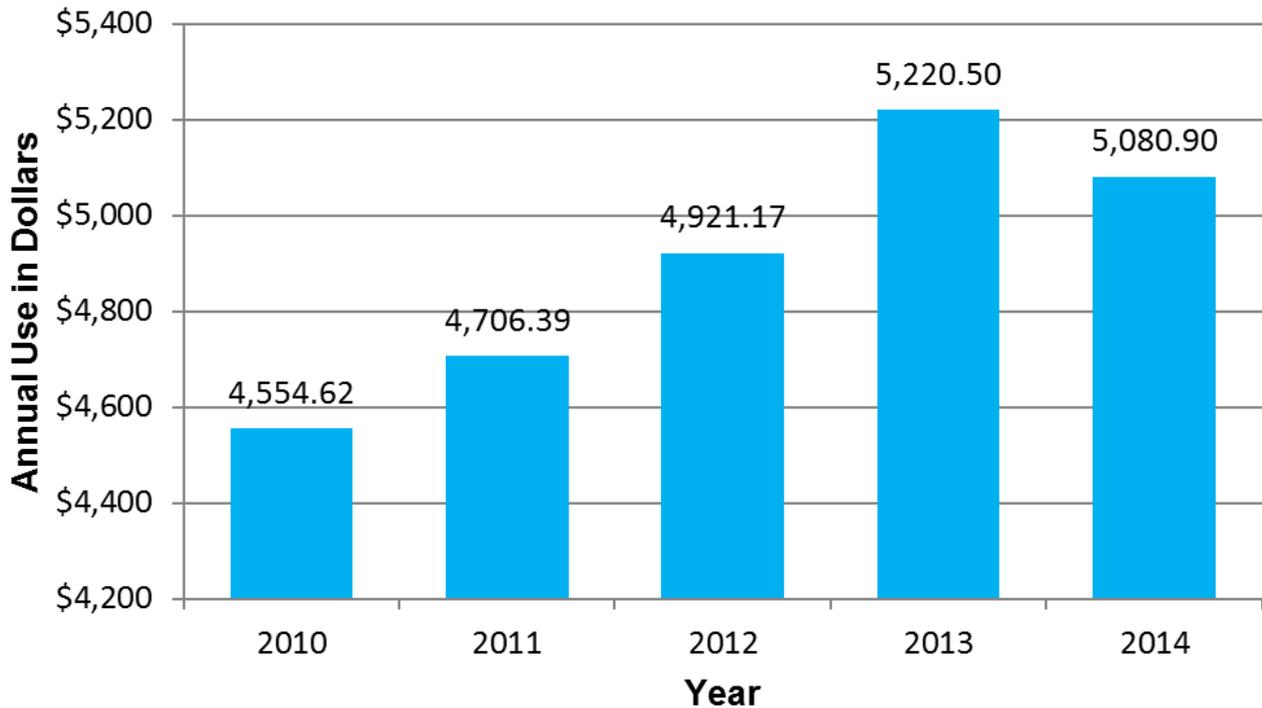
For Energy, one of the performance objectives is to reduce Servicewide building energy intensity by 35 percent by 2016 from the 2003 baseline, where energy intensity is energy consumption per square foot of building space. For Water, one of the performance objectives is to reduce potable water use intensity by 30 percent by 2020 from the 2007 baseline.

Historical data for energy and water consumption reported by DESO and available in the Energy Data Reporting Tool (EDRT) is shown below.

Annual Energy Consumption



Annual Water Consumption



Highlights for DESO include:

- Energy consumption at DESO has remained relatively stable over the last 5 years, despite rising park attendance. A number of energy-saving measures have been installed at the park including compact fluorescent lighting, better insulation, installation of energy-saving air conditioning units, and motion sensors connected to building lighting.
- Water consumption at DESO has risen along with park visitation. Recently, water-efficient fixtures were added in the Visitor Center.

Chapter 3. Summary of Key Stewardship Activities and Accomplishments

Activities and Accomplishments

The list below provides examples of stewardship activities and accomplishments by park staff and partners to maintain or improve the condition of priority park resources and values for this and future generations:

Natural Resources

- Assessment and treatment of the park's iconic Gumbo limbo trees to assist with recovery where possible and keep the trees as long as possible.
- Abatement of non-native/invasive plant species is ongoing. 100% of the park is assessed and treated.
- Shoreline protection with rip-rap and other measures is ongoing.
- Currently working with Florida Fish and Wildlife Conservation Commission to gain a sign to reduce speed of boat traffic along the park's shoreline.

Cultural Resources

- Completed tribal consultations and will complete NAGPRA repatriations in 2015.
- Established partnership with the Chickasaw Nation for exhibits, interpretation, and other educational media.
- Improvements made to the visitor center facility expand the ability to exhibit museum collections and develop rotating exhibits.
- Digitization projects are improving on-site access to museum objects and archives. Cataloged 68,821 objects, specimens, and archival documents since 2009.
- Continued efforts to increase local civic engagement by developing partnerships to engage youth and other members of the public in resource management and protection of archeological sites.
- Preparation of a cultural landscape report began in 2015.

Visitor Experience

- Updates and enhancement to the scope of the interpretation of the De Soto Expedition and park history have revised and updated the information to include the Native American's story in the local area.
- Established the Native American shell mound viewing area, which calls attention to the Native American side of the DESO story (partnered with Southeast Archeological Center and DESO Youth Advisory Committee).
- Established ranger-led Kayak Tours, a unique way to experience the park, and the first tour of its kind offered in a historic park.
- Special events such as Desoween, Winter Luminary, Five Centuries of Florida History, and Concerts on the Lawn continue to attract and engage an increasing number of visitors.
- DESO's award-winning Junior Ranger Guidebook and Junior Ranger Camp have continued success.
- Established the Park-In-Classrooms (PIC) programs with local schools.
- Park visitation has maintained relatively constant over the last five years. Total annual visitation is around 150,000 visitors.
- Nature trail improvements, accessible picnic areas, and non-invasive rail fencing on berm and other areas of park.
- Web media and social media presence has been expanded.

Park Infrastructure

- Completed the 500-foot berm-restoration project, placing 140 tons of rock rip-rap and an additional 450 linear feet of shell material to stabilize the shoreline and slow erosion.
- Remodeled the museum/theatre space into a multi-purpose space. Demolished the existing drop ceiling, upgraded electrical, HVAC and lighting.
- Redesigned and re-constructed the Living History Area, complete with wooden bleachers to replace old aluminum benches. Re-thatched the roof on 5 Chickee Huts.
- Repaired and improved the ADA-accessible deck in the Living History Area.
- Working with Manatee County Historic Wooden Boat Shop, DESO assisted with restoration and placement of a 25ft, 16th-century replica of a Spanish long boat. The boat is now used for Living History Camp.
- Designed and built 6 sectional/portable stages for concerts and events.
- Designed and installed a Butterfly Garden for a new Interpretive Media area.
- Created a new shell trail to the shell mound viewing area, with a new railing system to protect resources.

- Upgraded seasonal live-in Volunteer facilities, with more secure parking area, a 50 amp power source, and better waste water hook-up.
- DESO completed installation of a new fire & smoke detection system and monitoring contract for the Visitor Center and museum space.
- Patch and paint the exterior of the Visitor Center.
- DESO built 10 new picnic tables, 2 of which were ADA accessible and revamped the picnic area with new split rail fence.
- Upgraded electrical system at living history camp.
- In conjunction with Manatee County Natural Resources division DESO completed demolition and replacement of all handrails and side rail on our 500 ft. elevated boardwalk.
- In conjunction with Manatee County Natural Resources division DESO reconstructed and widened an existing bridge. The bridge joins DESO with Riverview Park, which allows access, to help in trail maintenance.

Chapter 4. Key Issues and Challenges for Consideration in Management Planning

De Soto National Memorial made a move to tell a balanced story of the historical events that occurred during the De Soto expedition. The park has implemented talks and exhibits that represent the Native American cultures that the 4,000-mile, four-year-long expedition encountered through the journey. As part of these efforts, a Jr. Ranger (Award Winning) book was developed and the Native American and the European aspects of the story are now represented. The onsite elements that were developed to address the Native American side of the story are: dugout canoe exhibit, building site for a dugout canoe with an educational wayside exhibit, and museum collection artifacts on display at the park multi-purpose room. Also, more emphasis in our living history programs about the natives way of life, weaponry and technology. The need to develop a new long range interpretive plan has been identified and we are requesting funds to develop it. This document will reflect the necessary changes about how the story is to be depicted, preserved, and how the interpretive goals should reflect the balance of addressing both European and Native cultures.

The Parks In classroom (PIC), uses the Jr. Ranger book to engage elementary school students and provides them with balanced activities that help the students learn about the significance of the historical events. The park welcomed hundreds of students per year to learn about the De Soto Expedition, which is part of Florida history curriculum. But due to several of the local education boards experiencing financial constraints, the number of field trips had been affected, thus impacting the number of students that came to the park each year. The PIC program has bridged that gap by providing an alternative funding to support field trips, which helps to promote school group visits to an accessible urban park.

The implementation of a new park program has provided the interpretive park rangers another opportunity to connect both sides of the Expedition story; the rangers guide visitors on an interactive kayaking experience where they teach about history, natural and cultural resources, and ways of life of the Native people. This paddling experience has been well received and has become our successful summer interpretive program. The kayaks represent a modern method of recreation and transportation used to enjoy our waterways, but we use them as a bridge to transport people in time. They represent the dugout canoes that Natives used to gather food, transport items for trade, travel to fishing and or hunting grounds, and explore new territory. The Europeans and Natives had the water uses in common. Before 2010 when the program was implemented, the summer season was a downtime from our living history programs and local visitation was minimal. We have re-kindled interest in the park to our local visitors, and have been able to reconnect several thousands of them to their park, its history, and the importance of maintaining our heritage.

Resource Management

These are the issues we are most concern with: sea level rise, archeological site disturbance, cultural resource maintenance and assessment, and invasive exotic management. The staff of De Soto is primarily focused on interpretive services. That said, employees with background in biology, historic preservation, and archeology assist in maintaining the park's cultural and natural resource assets. Our biggest concern is the amount of coastal erosion on the monument's shores. The higher tides and the increase in boat traffic and the wake they cast toward the north shore have impacted the zone with a loss of close to a foot of sand in some spots. The changes in the coast have a direct impact on the mangrove estuary and on cultural assets within this dynamic environment.

The park resources are vulnerable to climate change. Most of the park floods with the seasonally high tides of summer and winter, since most of the resources are below 5 feet of sea level. While a challenge, this also provides an opportunity to educate about climate change and coastal impact effects of sea level rise. The park's vulnerability to tropical systems is of concern; we recognize that there is little we can do to change that, but the park management continues to work to place erosion control systems for shore protection and mitigate the impact of storm surge, high tide impact, and boat traffic effects.

Facility management

The park has a number of structures in the living history reenactment camp. The palisade walls placed in the 80s need to be repaired and replaced. The thatch-roofed Chickee replicas, although in good condition, need to be re-thatched every 5 to 7 years depending on weather conditions. This area is the second main interpretive structure asset for the park. For four months out of the year, this is where interpretive staff conducts living history programs.

The Visitor Center, Head Quarters, and Maintenance buildings are in good condition, the Visitor Center was opened to the public in 1969. The park road and parking lot pavement are in need of being re-paved. The park continues to seal and restripe to extend the life cycle, but it eventually will need to be re-paved.

The trail system is well maintained. However, high tides and increased boat uses are creating washout spots and we need to place rip rap to minimize or mitigate the wake impact. Combined with an increase in its use, the trail is a park priority. The boardwalk is a 500-linear-foot, wooden and recycled-plastic structure through the mangrove estuary. As a structure in its twenties, it is starting to show

signs of deterioration and we are getting assessments about repairs and cost of replacement of this significant park asset. This structure provides accessibility and an opportunity to educate about park resources.

The park continues on a path of energy and water-use efficiency, and we are working on reducing our carbon footprint. Some of the improvements come in the energy field where we have changed most fixtures to the highest standard of energy efficiency in the market at the time. We have improved our visitors' restroom with water saving faucets, toilets, and urinals. In 2009 the park acquired a Hybrid small SUV; this vehicle promotes the park with window decals and exemplifies high ethical standards of energy efficiency in our community. Our goal is to continue to improve our energy-use efficiency and reduce our water usage.

Community

De Soto National Memorial has become once again, an icon in our community. The park had not been as active in community engagement and outreach activities before, but that has improved over the course of the last five years.

The Parks In Classroom program and the award-winning Jr. Ranger activity book have been great tools to incentivize and improve park visitation. Also, the establishment and continuous improvement of park special events, paired with an increased promotion of the events in the community, have changed the dynamics of park recognition with locals and out-of-state visitors.

As the park developed networking partners from government agencies and non-government organizations, we grew our off-site community engagement. The park gained recognition and we experienced an increase in participation for park events. As an example, when we started Desoween, we had less than a hundred participants. Over the years, the event improved its reputation and participation boosted to almost a thousand participants for the two-hour event.

Our friends group, Friends of De Soto Inc., has taken the task of promoting the park and fundraises to support the educational activities and programs of the park. Those efforts have translated to community awareness and support for them and for the memorial.

It is important to mention that park staff, volunteers, and Friends group members are a well-recognized and a respected part of the community.

References

See the [State of the Park Report for the Park website](#) for a more complete list of references to documents and data sets upon which the assessments in this State of the Park report are based. References for several of the key documents cited in this report are as follows:

- Blett, T., and G. Eckert. 2013. Restoration of nitrogen-impacted park systems through removal of invasive plant species: general guidelines for NPS plants and projects.
- Bobbink, R., K. Hicks, J. Galloway, T. Spranger, R. Alkemade, M. Ashmore, M. Bustamante, S. Cinderby, E. Davidson, F. Dentener, and others. 2010. Global assessment of nitrogen deposition effects on terrestrial plant diversity: a synthesis. *Ecological Applications*. 20(1):30–59.
- [Caffrey M. 2014](#). Sea Level and Storm Trends, De Soto National Memorial. National Park Service Climate Change Response Program. Fort Collins, Colorado
- Charola, E. 1998. Review of the Literature on the Topic of Acidic Deposition on Stone. National Center for Preservation Technology and Training. Available at: <http://ncptt.nps.gov/blog/review-of-the-literature-on-the-topic-of-acidic-deposition-on-stone-1998-09/>.
- [EPA NLFA] U.S. Environmental Protection Agency National List of Fish Advisories. “Advisories Where You Live” accessed from <http://fishadvisoryonline.epa.gov/General.aspx> on April 21, 2015.
- [Federal Aviation Administration \(FAA\). 2010](#). FAA Aerospace Forecast Fiscal Years 2010–2030. Federal Aviation Administration (FAA). Washington, DC. Published Report-2206282.
- [Federal Highway Administration. 2013](#). Traffic volume trends: May 2013. Traffic volume trends. Federal Highway Administration. Published Report-2215216.
- [Florida Department of Health. 2016](#). Your guide to eating fish caught in Florida. Florida Department of Health. Tallahassee, Florida.
- Intergovernmental Panel on Climate Change (IPCC). 2013. Climate Change 2013: The Physical Science Basis – Contribution of Working Group I to the fifth assessment report of the Intergovernmental Panel on Climate Change. Cambridge University Press. Cambridge, UK, and New York, NY, USA. Published Report-2215238. Available at: <http://www.ipcc.ch/report/ar5/wg1/>
- Mennitt, D., K. Sherrill, and K. Frstrup. A geospatial model of ambient sound pressure levels in the contiguous United States. *Journal of the Acoustical Society of America*. 135(5):2746–2764. Journal Article-2218195.
- [Moore, C. M., J. M. White, and F. Turina. 2013](#). Recommended Indicators and Thresholds of Night Sky Quality for NPS State of the Park Reports. National Park Service. Protocol Development Summary-2198592.
- [NADP-MDN] National Atmospheric Deposition Program, 2014. Annual MDN Maps. <http://nadp.sws.uiuc.edu/MDN/annualmdnmaps.aspx>.
- [NADP-TDEP] National Atmospheric Deposition Program, 2014. Total Deposition Maps, v2014.02. <http://nadp.sws.uiuc.edu/committees/tdep/tdepmaps>. November 3, 2014.
- [NPS-ARD] National Park Service, Air Resources Division. 2015. Air Quality Conditions & Trends by NPS Units: De Soto N MEM, 2012 End Year. National Park Service. Denver, Colorado. Accessed April 21, 2015. <http://www.nature.nps.gov/air/data/products/parks/index.cfm>.
- Osland, M. J., N. Enwright, and C. L. Stagg. 2014. Freshwater availability and coastal wetland foundation species: ecological transitions along a rainfall gradient. *Ecology*. 95(10):2789–2802. Journal Article-2225181.
- [Pardo, L. D., M. J. Robin-Abbott, and C. T. Driscoll. \(eds.\). 2011](#). Assessment of nitrogen deposition effects and empirical critical loads of nitrogen for ecoregions of the United States. U.S. Department of Agriculture (USDA), Forest Service General Technical Report. NRS-80. U.S. Department of Agriculture, Forest Service, Northern Research Station. Newtown Square, Pennsylvania. Published Report-2222177.
- U.S. Census Bureau. 2010. 2010 Census Urban and Rural Classification. U.S. Census Bureau. Geospatial Dataset-2218196. Available at: <http://www2.census.gov/geo/tiger/TIGER2010/UA/2010/>

[U.S. Census Bureau. 2011.](#) Urban Area Criteria for the 2010 Census. Federal Register. 76(164):53029–53043. Journal Article-2218204.

U.S. Census Bureau. 2015. Metropolitan Population Estimates. Retrieved April 13, 2015 from <http://www.census.gov/population/metro/data/index.html>

[Whisnant, D. E., and A. M. Whisnant. 2007.](#) Small park, large issues: De Soto National Memorial and the commemoration of a difficult history. Administrative History. National Park Service, Department of the Interior. Published Report-2193526.

See Also:

[Collection of Natural Resource-Related References](#)

[Collection of Cultural Resource-Related References](#)

[Collection of Visitor Experience-Related References](#)

Glossary

See the [State of the Parks home page](#) for a link to a complete glossary of terms used in State of the Park reports. Definitions of key terms used in this report are as follows:

Americans with Disabilities Act (ADA) and American Barriers Act (ABA)	Laws enacted by the federal government that include provisions to remove barriers that limit a disabled person's ability to engage in normal daily activity in the physical, public environment.
Archeological Sites Management Information System (ASMIS)	The National Park Service's standardized database for the basic registration and management of park prehistoric and historical archeological resources. ASMIS site records contain data on condition, threats and disturbances, site location, date of site discovery and documentation, description, proposed treatments, and management actions for known park archeological sites. It serves as a tool to support improved archeological resources preservation, protection, planning, and decision-making by parks, centers, regional offices, and the national program offices.
Baseline Documentation	Baseline documentation records the physical condition of a structure, object, or landscape at a specific point in time. A baseline provides a starting point against which future changes can be measured.
Carbon Footprint	Carbon footprint is generally defined as the total set of greenhouse gas emissions caused by an organization, event, product, or person.
Cultural Landscapes Inventory (CLI)	A Cultural Landscapes Inventory describes historically significant landscapes within a park. The inventory identifies and documents each landscape's location, size, physical development, condition, characteristics, and features, as well as other information useful to park management.
Cultural Landscape Report (CLR)	A Cultural Landscape Report is the principal treatment document for cultural landscapes and the primary tool for long-term management of those landscapes. It guides management and treatment decisions about a landscape's physical attributes, biotic systems, and use when that use contributes to historical significance.
Curation	National parks are the stewards of numerous types of objects, field notes, publications, maps, artifacts, photographs, and more. The assemblage of these materials comprises a museum collection. Curation is the process of managing, preserving, and safeguarding a collection according to professional museum and archival practices.
Exotic Plant Management Team (EPMT)	One of the ways the NPS is combating invasive plants is through the Exotic Plant Management Team Program. The program supports 16 Exotic Plant Management Teams working in more than 225 park units. EPMTs are led by individuals with specialized knowledge and experience in invasive plant management and control. Each field-based team operates over a wide geographic area and serves multiple parks.
Facility Condition Index (FCI)	FCI is the cost of repairing an asset (e.g., a building, road, bridge, or trail) divided by the cost of replacing it. The lower the FCI number, the better the condition of the resource.
Foundation Document	A park Foundation Document summarizes a park's purpose, significance, resources and values, primary interpretive themes, and special mandates. The document identifies a park's unique characteristics and what is most important about a park. The Foundation Document is fundamental to guiding park management and is an important component of a park's General Management Plan.

Fundamental and Other Important Resources and Values	Fundamental resources and values are the particular systems, processes, experiences, scenery, sounds, and other features that are key to achieving the park’s purposes and maintaining its significance. Other important resources and values are those attributes that are determined to be particularly important to park management and planning, although they are not central to the park’s purpose and significance. These priority resources are identified in the Park Foundation Document and/or General Management Plan. The short-cut name that will be used for this will be Priority Resources.
General Management Plan (GMP)	A General Management Plan is a strategic planning document that outlines the future management of a National Park Service site for the next 15 to 20 years. The plan will set the basic philosophy and broad guidance for management decisions that affect the park’s resources and the visitor’s experience.
Green Parks Plan (GPP)	The Green Parks Plan defines a collective vision and a long-term strategic plan for sustainable management of NPS operations. A critical component of the implementation of the GPP will be informing and engaging park staff, visitors, and community partners about climate change and sustainability to broaden opportunities to foster change.
Historic Integrity	Historic Integrity is the assemblage of physical values of a site, building, structure, or object and is a key element in assessing historical value and significance. The assessment of integrity is required to determine the eligibility of a property for listing in the National Register.
Historic Resource Study (HRS)	The historic resource study is the primary document used to identify and manage the historic resources in a park. It is the basis for understanding their significance and interrelationships, a point of departure for development of interpretive plans, and the framework within which additional research should be initiated.
Historic Structures Report (HSR)	The historic structure report is the primary guide to treatment and use of a historic structure and may also be used in managing a prehistoric structure.
Indicator of Condition	A selected subset of components or elements of a Priority Resource that are particularly “information rich” and that represent or “indicate” the overall condition of the Priority Resource. There may be one or several Indicators of Condition for a particular Priority Resource.
Integrated Resource Management Applications (IRMA)	The NPS-wide repository for documents, publications, and data sets that are related to NPS natural and cultural resources.
Interpretation	Interpretation is the explanation of the major features and significance of a park to visitors. Interpretation can include field trips, presentations, exhibits, and publications, as well as informal conversations with park visitors. A key feature of successful interpretation is allowing a person to form his or her own personal connection with the meaning and significance inherent in a resource.
Invasive Species	Invasive species are non-indigenous (or non-native) plants or animals that can spread widely and cause harm to an area, habitat, or bioregion. Invasive species can dominate a region or habitat, out-compete native or beneficial species, and threaten biological diversity.
List of Classified Structures (LCS)	LCS is an inventory system that records and tracks the condition of the approximately 27,000 historic structures listed in the National Register of Historic Places that are the responsibility of NPS.

Museum Collection	NPS is the steward of the largest network of museums in the United States. NPS museum collections document American, tribal, and ethnic histories; park cultural and natural resources; park histories; and other aspects of human experience. Collections are managed by professionally-trained NPS staff, who ensure long-term maintenance of collections in specialized facilities.
National Register of Historic Places (NRHP)	The National Register of Historic Places is the official list of the Nation’s historic properties worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service’s National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America’s historic and archeological resources. Listing in the National Register of Historic Places provides formal recognition of a property’s historical, architectural, or archeological significance based on national standards used by every state. The National Register is a public, searchable database about the places.
Native American Graves Protection and Repatriation Act (NAGPRA)	A federal law passed in 1990. NAGPRA provides a process for museums and federal agencies to return certain Native American cultural items (e.g., human remains, funerary objects, sacred objects, objects of cultural patrimony) to lineal descendants and culturally-affiliated Indian tribes and Native Hawaiian organizations.
Natural Resource Condition Assessment (NRCA)	A synthesis of existing scientific data and knowledge, from multiple sources, that helps answer the question: what are current conditions of important park natural resources? NRCAs provide a mix of new insights and useful scientific data about current park resource conditions and factors influencing those conditions. NRCAs have practical value to park managers and help them conduct formal planning and develop strategies on how to best protect or restore park resources.
Priority Resource or Value	This term refers to the Fundamental and Other Important Resources and Values of a park. These can include natural, cultural, and historic resources as well as opportunities for learning, discovery, and enjoyment. Priority Resources or Values include features that have been identified in park Foundation Documents, as well as other park assets or values that have been developed or recognized over the course of park operations. Priority Resources or Values warrant primary consideration during park planning and management because they are critical to a park’s purpose and significance.
Project Management Information System (PMIS)	A servicewide intranet application within the National Park Service to manage information about requests for project funding. It enables parks and NPS offices to submit project proposals to be reviewed, approved, and prioritized at park units, regional directorates, and the Washington Office.
Resource Management	The term “resources” in NPS encompasses the many natural, cultural, historical, or sociological features and assets associated with parks. Resource management includes the knowledge, understanding, and long-term stewardship and preservation of these resources.
Specific Measure of Condition	One or more specific measurements used to quantify or qualitatively evaluate the condition of an Indicator at a particular place and time. There may be one or more Specific Measures of Condition for each Indicator of Condition.
Volunteers In Parks Program (VIP)	The Volunteers In Parks Program was authorized by Public Law 91–357 enacted 1970. The primary purpose of the VIP program is to provide a vehicle through which the National Park Service can accept and utilize voluntary help and services from the public. The major objective of the program is to utilize this voluntary help in such a way that is mutually beneficial to the National Park Service and the volunteer. Volunteers are accepted from the public without regard to race, creed, religion, age, sex, sexual orientation, national origin, or disability.