National Park Service
U.S. Department of the Interior

State of the Park Report

Ocmulgee National Monument

Georgia

2014

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On the cover: The Earthlodge at Ocmulgee National Monument.

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.

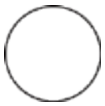
The purpose of Ocmulgee National Monument is to preserve, protect, study, and commemorate the site of more than 12,000 years of continuous human habitation by multiple cultures and peoples, and to study and interpret the interconnectedness of those cultures to the landscape of the Ocmulgee Old Fields.

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

- Ocmulgee National Monument preserves evidence of one of the longest periods of human habitation at any one site in the National Park System. Occupation is illustrated by prehistoric earthen mounds, including the only known spiral mound in the country; a restored ceremonial earth lodge with original clay floor; prehistoric trenches; an early colonial trading post; and Civil War earthworks.
- Ocmulgee National Monument has yielded artifacts from every major period of American Indian history in the Southeast, beginning with the Paleo-Indians and followed by a succession of cultural groups (10,000 BCE– present) who lived at the Ocmulgee Old Fields.
- The investigation and recovery of artifacts and information at the Ocmulgee Old Fields was instrumental in the development of scientific archeology. The monument is the site of one of the largest archeological investigations in North American history.
- The Ocmulgee Old Fields Project (1933–1941) employed one of the largest numbers of workers on an archeological investigation in the history of the Works Progress Administration (over 800, including an all-female African American crew). The work at this site served as a field school for several archeologists who impacted the field of archeology for generations.
- Ocmulgee National Monument possesses one of the largest collections of recovered artifacts (approximately 2.5 million) in the National Park System, together with associated maps and other documentation.

The summary table, below, and the supporting information that follows, provides an overall assessment of the condition of priority resources and values at Ocmulgee National Monument based on scientific and scholarly studies and expert opinion. The internet version of this report, available at http://www.nps.gov/stateoftheparks/ocmu/, 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		Estimated ozone, average visibility, and nitrogen and sulfur wet deposition levels in the park for 2005–2009 warrant significant concern based on NPS Air Resource Division benchmarks.
Geology and Soils		Soils in the park are deep and poorly drained with moderate to high erodibility. There is evidence of common, severe bank erosion and high stream sedimentation for the Ocmulgee River through the park. Soil acid deposition is high.
Water Quantity and Quantity		The five streams that flow through OCMU show signs of degradation from sedimentation, bank erosion, and trash accumulation. The two major streams, segments of the Ocmulgee River and its major tributary Walnut Creek, have been designated as impaired waters for biota and/or general recreation on the state's 303(d) list. The causes of impairment have been identified as urban nonpoint pollution, in particular, excessive sediment loading and high fecal coliform bacterial densities. The Ocmulgee River segment is also impaired for fish consumption because of high PCB content.
Flora and Fauna		The park has a high species richness and diversity of amphibians and birds, with 25 species of amphibians and 172 species of birds known to occur in the park. Twelve species of invasive plants identified by the Georgia Exotic Pest Plant Council as being of concern occur in the park. Feral hogs and their destructive effects on native habitats are rare in the main unit of the park, but hogs are still common in the Lamar Unit where control measures are more difficult to implement.
Dark Night Sky		The modeled Anthropogenic Light Ratio (ALR), a measure of light pollution calculated as the ratio of Average Anthropogenic Sky Glow to Average Natural Sky Luminance, was 7.5 which is considered of significant concern. The park is within the city of Macon, GA and is within 100 km of the Atlanta metropolitan area.

Priority Resource or Value	Condition Status/Trend	Rationale
Adjacent Land Cover and Use		The percent of lands surrounding the park that are used for agricultural use increased from 3.8% to 12% between 1992 and 2006. Areas classified as forest or wetlands decreased from 71.2% to 66% during the same time period. Human population density increased by 20.8% in the area surrounding the park between 1992 and 2010.
Cultural Resources		web ▸
Archeological Resources		Currently in ASMIS there are 22 identified sites and 26 sub sites. As of 5/28/13, 43 are in good condition, four in fair condition, and one in poor condition. The Lamar site is in a floodplain, as a result, can never be rated higher than fair. The earthlodge has some issues with cracking and the roof is deteriorating.
Cultural Anthropology		An Ethnographic Overview and Assessment study is in progress (2013). The park needs a Cultural Affiliation Study. The park is within the first Traditional Cultural Property (TCP) designated east of the Mississippi River (1999).
Cultural Landscapes		Cultural Landscape Inventories for the Lamar Site and OCMU were completed in 2008, with Cultural Landscape Reports completed in 2007. Per the CLR, *the landscape retains integrity given the extensive period of significance, continual occupation, and historic park development.* Exotic and invasive plants are a continuing threat to the park resources. Archeological sites are impacted by sedimentation and erosion, and the spiral ramp is threatened by erosion. The Lamar Site is threatened by flooding.
Historic Structures		All 18 of the park's historic structures were documented for the National Register and contribute to the Ocmulgee National Monument Historic District, which was originally listed in 1976. In 1996, an amendment was submitted to and accepted by the Keeper, which expanded the period of significance to include the period of park development and added the visitor center and commemorative flagpole to the district. Presently, the district is listed under criteria A, C, and D, and represents four separate periods of significance, A.D. 900–100, A.D. 1250–1650, 1690–1715, and 1936–1951. In the 1996 amendment, 5 structures were listed as being non-contributing.
History		The Administrative History published in 1985 needs to be updated, and all of the National Register documentation done in 1996 needs to be updated. The park's List of Classified Structure (LCS) data are current.
Museum Collections		The park museum collections are extensive and the archeological collections are the largest in the NPS. They have always been recognized as an important resource for the site and by researchers. Funding requests have been submitted to support cataloging of a backlog of more than 1.8 million artifacts as well as long term preservation and management. Archival collections document the intensive archeological work and management of these significant resources.
Visitor Experience		web ▸
Number of Visitors		The total of 120,025 visitors to the park in 2012 is 7% higher than the 5-year average of 111,993 visitors for 2007–2011.

Priority Resource or Value	Condition Status/Trend	Rationale
Visitor Satisfaction		Based on the standard visitor satisfaction survey conducted each year, the percentage of visitors satisfied in 2012 was 96.0%, similar to the 5-year average of 97.0% for 2007–2011.
Interpretive and Education Programs – Talks, Tours, and Special Events		The number of Ranger-led programs and the number of participants has increased during the past 5 years. The Junior Ranger program participation has increased steadily, with more than 2,000 children receiving the Junior Ranger badge in the past 5 years. The Ocmulgee Indian Celebration has been held for the past 23 years, with a record 19,500 participants in 2012. The park is participating in the Civil War 150th anniversary.
Interpretive Media – Brochures, Exhibits, Signs, and Website		The park has replaced 5 outdated wayside signs and added 21 new waysides in the past five years. Visitor Center exhibits were updated in 2009. The park website is updated on a regular basis and is visited by thousands of visitors annually. Facebook and Twitter social media sites have been developed and are maintained on a daily basis.
Accessibility		The Visitor Center is accessible to visitors in wheelchairs, and the park orientation film has closed caption. The park brochure is made available in 15 languages.
Safety		The safety or park visitors and staff is a priority, and the overall number of safety and law enforcement incidents is low. The majority of incidents occur during special events when there is high visitation. Park staff receives CPR and AED training annually, and the response time from local emergency medical services personnel is 5 minutes.
Partnerships		In 2012, 660 volunteers contributed more than 4,000 hours to help with park stewardship. The park maintains an average of 15 partners each year for the Indian Celebration. New partnerships have been developed each year for other programs and activities.
Park Infrastructure		web ▸
Overall Facility Condition Index		The 62 assets at Ocmulgee National Monument have an overall FCI of 0.175, which is Poor based on industry and NPS standards. The poor condition is primarily a result of deferred maintenance on the park roads and parking areas. A number of improvements to the park's trail system have been made in recent years.
Energy Consumption		Energy usage (BTUs per gross square footage of buildings) at the park in 2012 was 8% higher than the average for the previous 4 years. The replacement this year of part of the HVAC system at the Visitor Center has already resulted in a reduction in energy consumption in recent months.
Water Consumption		Water consumption at the park in 2012 was 23.6% higher than the 4-year average for 2008–2011. Higher water use was needed to establish a new area of grass for the Indian Celebration in 2012, and for landscaping during the recent drought.

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

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 are listed in Chapter 3 of this report. The Park continues to successfully interact with Federally Recognized Indian Tribes who consider the site sacred. Numerous consultations and the Park's signature annual event, the Ocmulgee Indian Celebration, demonstrates this success. Completed surveys reveal significant Natural Resources remain intact at the Park. Exotic vegetation removal work has cleared 200 acres. Park staff has cataloged and processed over 500,000 objects and archives in the last five years. Lamar Mound A and Civil War earthwork have been protected by the removal of large trees. The Curatorial Storage facility has been enhanced and improved. Park staff has developed 21 new wayside exhibits, a cell phone tour, 50 site bulletins, completely new museum exhibits, and revised the 30 year-old Lantern Light Tour program. In December 2012, the staff presented programs commemorating the Park's 75th Anniversary. Park staff developed a new HVAC system design which could significantly improve efficiency. Park restrooms have been upgraded with low water flow fixtures installed. High speed internet access is now available to all staff. The Park has recently produced a Foundation Document, State of the Park Report and is in the process of producing a Boundary Adjustment Study.

Key Issues and Challenges for Consideration in Management Planning

The Park holds the largest museum collection in the National Park System and most likely possesses the largest backlog of uncatalogued material. This condition places these irreplaceable resources at risk. Relations with Indian Tribal groups are critical due to the status of the Park as a sacred site. An on-going Boundary Adjustment Study will address adjacent threatened sites as well as the vulnerability of the detached Lamar Unit. Recent understanding of the value of the Park's natural resources highlights the lack of resources available to protect and preserve them. The hydrology of the park is not understood and park infrastructure appears to be threatened. The Park has long-standing identification issues with the local community due to confusion over the name of the site (Ocmulgee National Monument vs. Ocmulgee Indian Mounds). The local community believes the Park needs a new entrance, closer to downtown attractions. Macon and Bibb County are forming a new consolidated government with unknown impacts on longstanding local relationships. Aging infrastructure issues include the failing Park Road and Visitor Center roof. Visitor Center roof leaking threatens structural integrity and museum exhibits, resulting mold growth threatens the health of staff and the public. A 2011 arson fire has left the Park's 150 year old Dunlap House in need of restoration. This historic structure is one of the oldest in the Macon community.

Great Temple Mound and Lesser Temple Mound at Ocmulgee National Monument.

Chapter 1 - Introduction

The purpose of this State of the Park report for Ocmulgee National Monument is to assess the overall condition of the park's priority resources and values, 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.

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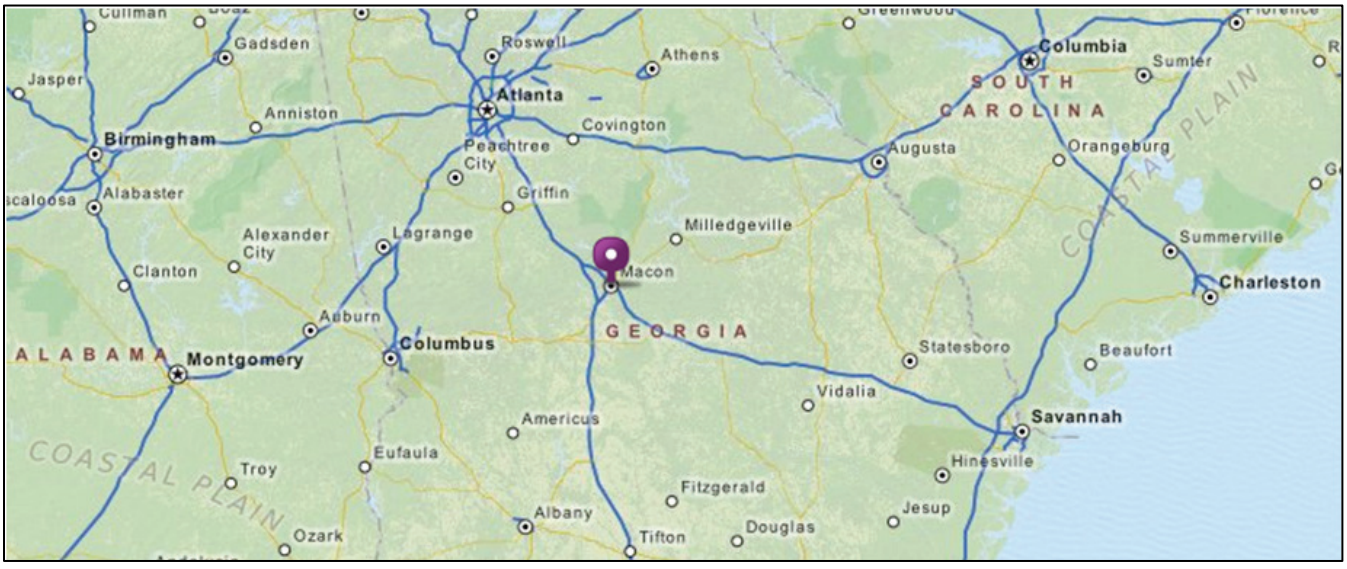
- Ocmulgee National Monument has yielded artifacts from every major period of American Indian history in the Southeast, beginning with the Paleo-Indians and followed by a succession of cultural groups (10,000 BCE– present) who lived at the Ocmulgee Old Fields.
- The investigation and recovery of artifacts and information at the Ocmulgee Old Fields was instrumental in the development of scientific archeology. The monument is the site of one of the largest archeological investigations in North American history.
- The Ocmulgee Old Fields Project (1933–1941) employed one of the largest numbers of workers on an archeological investigation in the history of the Works Progress Administration (over 800, including an all-female African American crew). The work at this site served as a field school for several archeologists who impacted the field of archeology for generations.
- Ocmulgee National Monument possesses one of the largest collections of recovered artifacts (approximately 2.5 million) in the National Park System, together with associated maps and other documentation.

Map of the Park



Location of Ocmulgee National Monument in Macon, Georgia

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
Ozone	Annual 4th-Highest 8-Hour Concentration		The estimated ozone level for 2005–2009 at Ocmulgee NM was 79.9 parts per billion (ppb), therefore, the condition status warrants significant concern based on NPS Air Resource Division benchmarks. A risk assessment concluded that plants in at Ocmulgee NM were at high risk for ozone damage (Kohut 2007; Kohut 2004). Ozone-sensitive plants in Ocmulgee NM include *Fraxinus pennsylvanica* (green ash) and *Liquidambar styraciflua* (sweetgum). For 2000–2009, the trend in ozone concentration at Ocmulgee NM improved (NPS ARD 2013). List of ozone-sensitive plant species.
Deposition	Sulfur Wet Deposition		For 2005–2009, estimated wet sulfur deposition was 3.7 kilograms per hectare per year (kg/ha/yr), therefore, the condition status warrants significant concern based on NPS Air Resource Division benchmarks. Although levels of wet sulfur deposition at Ocmulgee NM are relatively high, Ocmulgee NM ecosystems may have very low sensitivity to acidification effects from atmospheric deposition relative to all Inventory & Monitoring parks

			(Sullivan et al. 2011a; Sullivan et al. 2011b). No trend information is available because there are not sufficient on-site or nearby wet deposition monitor data (NPS ARD 2013).
	Nitrogen Wet Deposition		For 2005–2009, estimated wet nitrogen deposition was 3.3 kilograms per hectare per year (kg/ha/yr), therefore, the condition status warrants significant concern based on NPS Air Resource Division benchmarks. The park may be highly sensitive to nitrogen-enrichment effects relative to all Inventory & Monitoring parks (Sullivan et al. 2011c; Sullivan et al. 2011d). Certain vegetation communities in the park, including wetland plant communities, may be vulnerable to excess nitrogen deposition, which can alter plant communities and reduce biodiversity. No trend information is available because there are not sufficient on-site or nearby wet deposition monitor data (NPS ARD 2013).
Visibility	Haze Index		For 2005–2009, estimated average visibility in Ocmulgee NM was 12.2 deciviews (dv) above natural conditions, therefore, the condition status warrants significant concern based on NPS Air Resource Division benchmarks. No trend information is available because there are not sufficient on-site or nearby visibility monitor data (NPS ARD 2013).

Geology and Soils

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Terrestrial Soil Erodibility	Soil Class Type Soil Erodibility Factor Critical Shear Stress		Soils in the park are classified as Bibb-typic soils, fluvaquent—mostly lean dry with sand, moderate to high in erodibility and critical shear stress; very deep and poorly drained, hydric and flood-prone (NPS 2009).
Riparian Soil Erodibility	Channel Stability Index		There is evidence of common, severe stream bank erosion (CSI likely >20).
Stream Sedimentation	% bankside visual estimate of sediment cover		Evidence of common, high, and extremely rapid sedimentation: Sediment cover is 60–80% in many stream locations (Burkholder et al. 2010).
Soil Acidity	Soil pH		Natural soil pH is 5.8 to 7.0, but acid deposition in the area is high (Burkholder et al. 2010).

Water Quantity and Quality

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Groundwater Quantity	Groundwater Level		Groundwater levels have decreased significantly at the one well near the park where the period of record exceeds 10 years (Rasmussen et al. 2009). The latest data on groundwater levels are available from USGS.
Surface Water Dynamics	Daily mean discharge Mean monthly flow Magnitude and duration of extreme high and low flow events		Frequency of extreme low flows significantly higher during 2012 reflecting drought conditions based on analysis of flows since 1960 in Ocmulgee River using Indicators of Hydrological Alteration. Evidence of continued, ongoing poor control of stormwater runoff upstream from the park in tributary streams (Gregory et al. 2012). USGS publishes the latest stream gage data for the Ocmulgee River at Macon and near Jackson, GA.
Water Chemistry Ocmulgee River	Temperature and pH		97% of temperature readings are within the GA minimum and maximum standards of 5 and 90 °F. 100% of pH readings are within the GA minimum and maximum standards of 6.8 and 8.5 (Burkholder et al. 2010).
	Dissolved Oxygen Biological Oxygen Demand		98% of dissolved oxygen measurements were above GA standards of average concentrations of >5.0 mg/L and minimum concentrations of 4 mg/L. 95% of samples met recommended concentrations greater than 3 mg/L (Burkholder et al. 2010).
	Nitrate + Nitrite Total Phosphorus		65% of Nitrate + Nitrite samples met EPA recommended concentration of <177 µg/L. 23% of Total Phosphorous samples met EPA recommended concentrations of <30 µg/L (Burkholder et al. 2010).
	Total Suspended solids		84% of samples in compliance with EPA standards (less than or equal to 25 mg/L). Condition of "Warrants Significant Concern" given due to consensus among subject matter experts is that the EPA standards are too high for the types of systems present coupled with evidence of continued high sedimentation rates (Burkholder et al. 2010).
	Fecal coliform bacteria		74% of samples in compliance with GA standards for geometric means of <200 (May–October), <1,000 (November–April); 71% of samples in compliance with EPA standard for geometric means of <400 (Burkholder et al. 2010).
	Lead concentration Zinc concentration		42–71% of samples met EPA recommended levels of <2.5 µg/L for lead; 70% met EPA recommended levels of <87 µg/L for Zinc (Burkholder et al. 2010).

Flora and Fauna

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Plants	Species occurrence and diversity		OCMU has 406 known plant species (NPSpecies database). Wildflowers are of particular interest to the park and visitors alike.
Exotic Plants	Number of exotic/ invasive species Number of "top ten" species present		Twelve invasive species identified by the Georgia Exotic Pest Plant Council as Category I occur in the park (i.e., species that invade intact systems, displace native vegetation, and alter ecological processes), including Chinese privet, kudzu, and honeysuckle. Active control measures are in place, but long-term funding to manage continuous new invasions is tenuous (Burkholder et al. 2010).
Exotic Animals	Number of feral hogs Feral hogs removed		Feral hogs are now rarely found in the main unit of the park because of active control measures by park staff, but hogs are still present and thrive at the Lamar Unit where control measures are more difficult to implement (Burkholder et al. 2010).
Amphibians	Species occurrence and diversity		The diversity of amphibians at OCMU is high, with 25 species of amphibians documented to occur in the Park (16 species of frogs or toads, 9 species of newts or salamanders). Long-term monitoring has been initiated using nighttime auditory surveys (Byrne et al. 2011).
Birds	Species occurrence and diversity		Bird species diversity is high at OCMU, with 172 species known to occur in the Park (NPSpecies database). Long-term monitoring has been initiated using distance sampling methods (Byrne et al. 2011).

Resource Brief: Exotic Plants

Ocmulgee National Monument is heavily infested with exotic vegetation. Exotic vegetation is prolific and directly threatens the principal cultural resources that the Park was established to preserve. Examples include the Great Temple Mound, threatened by tree-of-heaven (*Ailanthus altissima)*, and the Lamar Mound B (Spiral Mound), threatened by privet (*Ligustrum*). The Georgia Exotic Pest Plant Council (GA-EPPC) has ranked the Top 10 most noxious exotic plants in the State (http://www.gaeppc.org/exotalk1.html). OCMU has 5 of the Top 10, including mimosa (*Albizia julibrissin)*, bamboo (*Phyllostachys aurea)*, kudzu (*Pueraria montana*), Chinese privet (*Ligustrum sinense)*, and Japanese honeysuckle (*Lonicera japonica*). These plants rapidly overgrow and shade out native, beneficial plant species, inhibiting their growth and displacing them in forests, fields, and/or wetlands. For berry-producers such as Chinese privet, the berries are less nutritious for wildlife than are the berries of native species.

The EPPC also created a Georgia List of Exotic and Invasive Plants (http://www.gaeppc.org/list.cfm), wherein plants are ranked into categories with #1 being worst (most noxious).

NPS Exotic Plant Management Team at the park removing exotic vegetation that is a threat to the park's natural and cultural resources.

Category #1 includes 20 species, and is defined to include exotic plants that are "a serious problem in Georgia natural areas by extensively invading native plant communities and displacing native species." OCMU has 13 of the 20 species within Category #1 including tree-of-heaven, mimosa, Chinese privet, Japanese honeysuckle, kudzu, English ivy (*Hedera helix)*, Chinaberry (*Melia azedarach)*, Chinese wisteria (*Wisteria sinensis*), alligatorweed (*Alternanthera philoxeroides)*, Japanese climbing fern (*Lygodium japonicum)*, Chinese tallowtree (*Triadica sebifera*), autumn-olive (*Elaeagnus umbellate*), and Japanese stiltgrass (*Microstegium vimineum).*

The park has established a list of approximately 19 exotic plant species that is currently being used by natural resource staff for management control. The park currently does not have a guiding plan with a systematic approach to the long-term management of exotic plants. Next steps for the park in managing the condition and health of its plant communities will be to develop a long-term management plan for exotic plant control. A vegetation management plan should include restoration strategies for areas where plant removal will negatively impact visitor experiences by increased noise and disturbance of the viewshed.

Resource Brief: Amphibians

Amphibian communities in the southeastern U.S. are widely considered to be among the most diverse in the world, and they are a valued resource in parks in the southeast (Byrne et al. 2011). OCMU's forests, meadows, and wetlands (especially the Ocmulgee River to the west and Walnut creek, which flows through the Park) provide suitable habitats for wildlife to breed, overwinter, rest during migration, and reside throughout the year. According to information gathered in 2004, OCMU provides habitat for 25 native species of amphibians including 16 species of frogs and toads, and 9 species of newts and salamanders. Because of their complex life histories, habitat requirements, anatomy, and physiology, amphibians are considered to be good indicators of changes in ecosystem conditions as they are affected by climate change, land use development and conversion, contaminants, and changes in hydrology.

Green Treefrog (Hyla cineria) heard during amphibian monitoring at OCMU in 2009. Photo by Briana Smrekar. National Park Service.

Amphibian communities were monitored at OCMU in May 2009 by the NPS Southeast Coast Inventory and Monitoring Network (SECN) using automated recording devices at 20 locations for 10 nights. During this sampling event, 11 native anuran species were detected and no non-native species were detected (Byrne et al. 2011). Bird-voiced tree frog (*Hyla avivova*) was the most widely distributed amphibian. Southern toad (*Bufo terrestris*), cricket frog (*Acris crepitans/gryllus*), green treefrog (*Hyla cinerea*), and green frog (*Rana clamitans*) were detected at more than five locations. These data will serve as a baseline for future monitoring efforts of vocal anurans at the Monument. The SECN also conducted surveys for chytrid fungus (a pathogen linked to amphibian population declines around the world) and did not find evidence of its presence in any species (Byrne and Moore 2011).

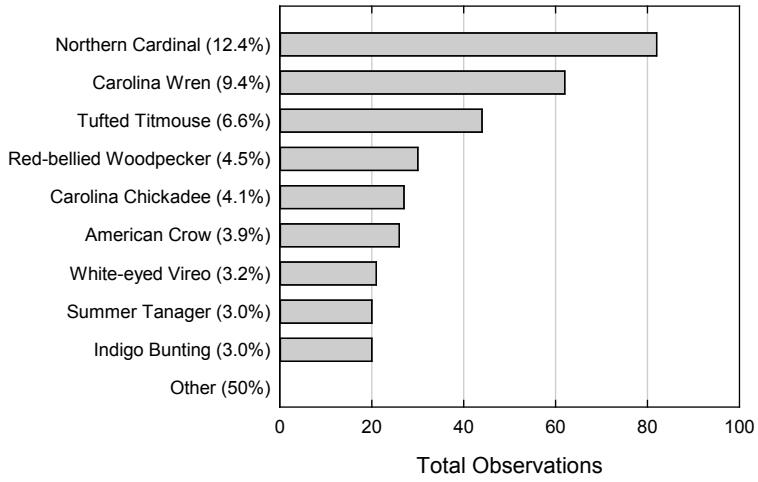
Table 3. Naïve occupancy estimates (proportion of sites where the species was detected) for amphibians at OCMU during surveys in 2009. Modified from Byrne et al. 2011).

Scientific Name	Common Name	Proportion of sites where seen
Hyla avivoca	Bird-voiced treefrog	0.67
Hyla cinerea	Green treefrog	0.50
Acris crepitans/gryllus	Cricket frog	0.39
Rana clamitans	Green frog	0.39
Bufo terrestris	Southern toad	0.33
Bufo fowleri	Fowler's toad	0.11
Hyla chrysoscelis	Cope's gray treefrog	0.11
Rana catesbeiana	Bullfrog	0.11
Rana sphenocephala	Southern leopard frog	0.11
Hyla squirella	Squirrel treefrog	0.06
Gastrophryne carolinensis	Eastern narrow-mouthed toad	0.06

Resource Brief: Birds

More than 172 species of birds have been documented using the forest, meadow, wetland, and riparian habitats at OCMU, including 36 species that are mostly associated with wetland or aquatic habitats. Wading birds are abundant at the park. Birding is a common visitor use at OCMU, with members of the local community and Audubon Society birding at the park on a daily basis. The park has four State-listed Species of Concern: Cerulean warbler, golden-winged warbler, and Wilson's plover (State listed); and the endangered wood stork (State and Federally listed).

The NPS Southeast Coast Inventory and Monitoring Network (SECN) conducted a survey of landbirds in the park in 2009 and recorded total of 663 birds representing 71 species. Three species, the alder flycatcher, cliff swallow, and tree swallow, were new reports for OCMU. The most widely distributed species were the Carolina wren, northern cardinal, and tufted titmouse, which were found at all of the sampling locations (see graphic for the most commonly detected species below). Only two exotic species, European Starling and House Finch, were detected during the survey. The second most widely distributed species group included the red-bellied woodpecker, Carolina chickadee, American crow, white-eyed vireo, and tufted titmouse, which were detected in 70 to 90% of the sampling sites. A total of 25 priority species, as identified by Watson and Malloy (2006), were detected: the Acadian flycatcher, American coot, brown-headed nuthatch, Cerulean warbler, chimney swift, eastern kingbird, eastern towhee, eastern wood-pewee, great egret, hooded warbler, indigo bunting, Kentucky warbler, mallard, northern flicker, northern parula, pine warbler, prairie warbler, prothonotary warbler, red-bellied woodpecker, red-headed woodpecker, red-shouldered hawk, summer tanager, white-eyed vireo, yellow-billed cuckoo, and yellow-throated warbler.



Anhinga

Dark Night Sky

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The nighttime dark sky, or photic environment and its perception of it by humans (the lightscape) are important to many facets of park integrity. They are both a natural and a cultural resource and are critical aspects of scenery, visitor enjoyment, and wilderness character. Many wildlife species and ecological processes depend on natural darkness and a natural nighttime photic regime. OCMU has important cultural resources, and natural resources. The park provides habitat for a number of threatened and endangered species. For these reasons the park is considered to possess a higher sensitivity photic environment (Level 1). The reference condition is set at the natural condition, based on an accurate physical model of the night sky. Current conditions or desired future conditions should be expressed as a ratio over the reference condition. Learn more in the document Recommended Indicators of Night Sky Quality.

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Anthropogenic Light	Anthropogenic Light Ratio (ALR)— the Average Anthropogenic Sky Glow: Average Natural Sky Luminance		The modeled ALR value of 7.50 for the park is of significant concern. The city of Macon, GA is located immediately west of the Monument, and the park is less than 100 km southeast of the Atlanta Metropolitan Area with a population of 5.5 million. While Macon experienced a slight population decline from 2001 to 2010, the Atlanta metropolitan area saw a 28% increase in population over the last decade. A decreasing trend in night sky quality is expected.

Adjacent Land Cover and Use

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Adjacent Land Cover and Use	Agricultural Land Use		Between 1992 and 2006, land uses classified as grasslands, pastures, row crops, small grains, or fallow lands increased from 13.1% to 17.5% of the watershed upstream of OCMU, and from 3.8% to 12.0% of the area surrounding the park (SECN I&M network, unpublished data).
	Forested & Wetland Land use coverage		Between 1992 and 2006, land uses classified as Deciduous, Mixed, and Evergreen Forest, combined with those classified as Woody or Emergent Herbaceous Wetlands, decreased from 71.1% to 66.3% of the watershed upstream of OCMU, and from 71.2% to 66.0% of the area surrounding the park.
	Developed land use coverage (non-open space)		Between 1992 and 2006, land uses classified as Low/High Intensity Residential or Commercial/Industrial/ Transportation decreased from 6.2% to 5.7% of the watershed upstream of OCMU, and from 12.5% to 9.1% of the area surrounding the park.
Human Population Density and Demographics	Human Population		From 1992–2010, human population decreased 8.7% in the watershed upstream of OCMU but increased 20.8% in the area surrounding the park.

Resource Brief: Historical and Projected Changes in Climate at Ocmulgee NM

Climate change, in conjunction with other stressors, is impacting all aspects of park management from natural and cultural resources to park operations and visitor experience. Effective planning and management must be grounded in our comprehension of past dynamics as well as the realization that future conditions may shift beyond the range of variability observed in historical data. Climate change will manifest itself not only as shifts in mean conditions (e.g., increasing mean annual temperature) but also as changes in climate variability (e.g., more intense storms and droughts). Put another way, land managers are dealing with both rapid directional change and tremendous uncertainty. Understanding climate change projections and associated levels of uncertainty will facilitate planning actions that are robust regardless of the precise magnitude of change experienced in the coming decades.

Historical climate trends (1892–2012)

Historical climate trends for Ocmulgee (Fisichelli 2013) are based on historic climate data from a nearby long-term weather station (Milledgeville, GA; cdiac.ornl.gov). Over the entire 121-year instrumental record (1892–2012) mean annual temperature showed an increasing linear trend, +0.2 °F per decade (see Figure below). Annual precipitation showed strong interannual variability and no linear trend over the 121 year record, while summer seasonal precipitation showed a decreasing trend, -0.26 inches per decade (Fisichelli 2013).

Future climate projections

Future climate projections for the area including Ocmulgee National Monument are from multi-model averaged data (Kunkel et al. 2013). Mean annual temperature, compared with the 1971–1999 average, is projected to increase 2 °F by mid-century and 4–7 °F by the end of the century, depending on the greenhouse gas emissions scenario (see Figure below). Current greenhouse gas emissions are on a trajectory similar to the higher emissions scenarios (see references in Fisichelli 2013). Warming by mid-century is projected for all seasons, with the greatest increases likely in summer and fall (Kunkel et al. 2013). There is wide agreement among individual climate models in the direction and magnitude of warming over the coming decades. Precipitation variability is likely to remain large over the coming decades, and there is greater uncertainty in precipitation than temperature projections (Kunkel et al. 2013).

In addition to warmer mean temperatures and changes in total precipitation, climate change will manifest itself in many other ways. This includes more frequent heat waves, droughts, floods, and an extended frost-free season. The number of days with maximum temperatures >95 °F is projected to double by mid-century to 40+ days/year, the frost-free season will expand by 20 days, and the number of days with minimum temperatures below freezing is projected to decrease by approximately 20 days (high (A2) emissions

scenario 2041–2070 compared with 1980–2000; Kunkel et al. 2013). Small changes in total annual precipitation may mask large shifts in the precipitation regime and associated impacts to ecosystems. The annual maximum number of consecutive days with rainfall less than 0.1 inches may increase by a few days while the annual number of days with heavy rainfall (>1 inch) is projected to increase by 10 to 20% (high (A2) emissions scenario, 2041–2070 compared with 1980–2000; Kunkel et al. 2013). Significantly warmer temperatures and a more variable precipitation regime, including heavier rain events and an increased number of days between rain events, may lead to both more frequent droughts and more severe flooding and erosion.

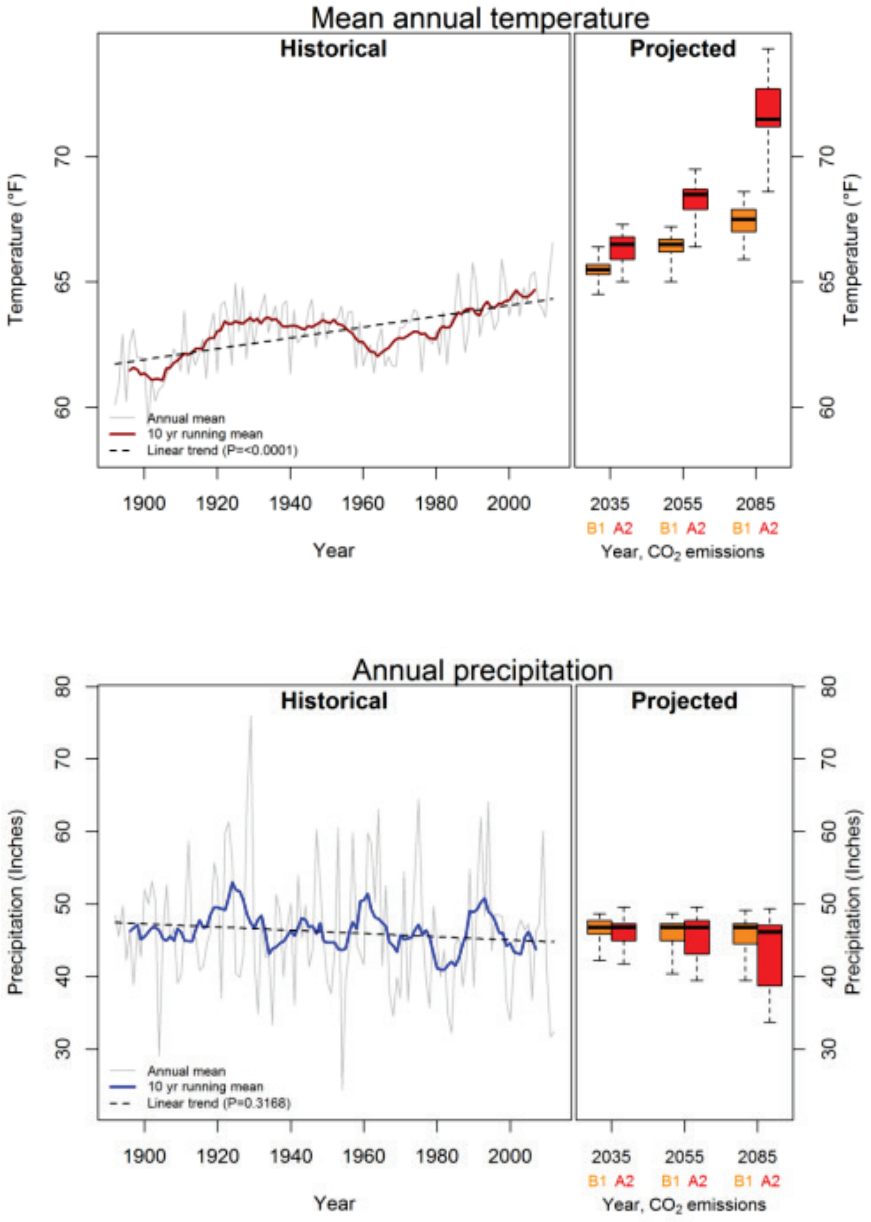

Figure legend. Historical and projected mean annual temperature and annual precipitation for Ocmulgee National Monument. Historical data (1892–2012) are from the Milledgeville, GA long-term weather station (cdiac.ornl.gov). Projected climate change (30 year means) for the region including the park (data from Kunkel et al. 2013, see Tables 4, 6 and Figures 26, 37) are for three future time periods centered on 2035 (2021–2050), 2055 (2041–2070), and 2085 (2070–2099). Two greenhouse gas emissions scenarios are presented, the low (B1) and high (A2) scenarios (IPCC 2007). Projected climate boxplots indicate the variability in future projections among 14–15 CMIP3 climate models. Values for the area including the monument are based on projected changes from individual climate models averaged across the southeast region: the bold horizontal black line represents the mean among all models, the upper and lower bounds of the boxes indicate the 75th and 25th percentile model output values and the whiskers show the minimum and maximum change averaged across the region.

2.2. Cultural Resources

Archeological Resources

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Percent of sites with known date ranges associated with a research theme		*An Archeological Overview and Assessment of the Lamar Mounds* was completed in 1991.
Inventory	Percent of park adequately surveyed		About 17% of the park has been adequately surveyed based on the 1938 ethnographic study, but a recent GIS analysis by the NPS Southeast Archeology Center concluded that only 4% of the park has been adequately surveyed. The study *An Archeological Overview and Assessment of the Lamar Mounds* was completed in 1991.
Documentation	Percentage of known sites with adequate National Register documentation		Only 27 of the 48 known sites and sub sites (56.25%) have been listed and adequately documented for National Register purposes.
Condition	Percentage of archeological resources in good condition		The park has 21 known archeological sites with 19 (90%) in Good condition and 2 in Fair condition. Condition assessments are overdue for 20 sites. The Lamar site is in a floodplain and can never be rated higher than fair. The earthlodge has some issues with cracking of the floor and roof deterioration.

Resource Brief: The Birthplace of Archeology

The site of Ocmulgee is synonymous with Georgia and Southeastern archeology. During the 1930s it was a training ground for a whole generation of American archeologists, some of whom later became the "fathers" of modern American Archeology. New professional methodologies were developed, and some of the type sites that came to define entire cultural periods (e.g., Lamar, Swift Creek, Macon Plateau) were defined. The history of the park from its inception as a Depression-era works project through to World War II is intimately intertwined with archeological project management on a grand scale by the Smithsonian Institution, various federal relief agencies (e.g., Works Project Administration, Civilian Conservation Corps, Federal Emergency Relief Agency) and the National Park Service. While excavations began at the site in 1933, the site was not designated a National Monument until 1936.

Archeological dig at the Cornfield at Ocmulgee.

Efforts to preserve the Indian mounds of the Macon Plateau were first begun during the 1920s by General Walter A. Harris, a prominent Macon attorney and local historian (Marsh 1986). Harris wrote to the Bureau of American Ethnology in February 1922 to express his interest in acquiring and preserving the Indian remnants of the Ocmulgee fields. The letter was acknowledged by the Smithsonian Institution but nothing developed. In 1929, Harris attempted to attract the interest of the Smithsonian Institution once again. In April of that year the General wrote the Bureau of American Ethnology, suggesting that the city

of Macon provide funds for Smithsonian-led excavations. The bureau Chief M.W. Stirling arrived in Macon twenty days later and visited the Indian mounds. Stirling recommended that the mounds be excavated.

The Civil Works Administration (CWA) granted funds for excavations at the Ocmulgee site and the Smithsonian agreed to oversee the project. The Smithsonian appointed anthropologist Dr. Arthur R. Kelly of Harvard University to direct the excavations and James A. Ford to assist. In 1935, General Harris, Dr. Harrold, and Representative Carl Vinson of the Sixth District devised a list of needed development projects. The plan called for the construction of a museum and restoration of various archeological features, road improvements, tree planting, and fence construction. Early development plans for Ocmulgee were based on archeological work which was conducted in the area between 1933 and 1936. During that time excavations were undertaken by the Civil Works Administration (CWA), Federal Emergency Relief Administration (FERA), and Works Progress Administration (WPA). Dr. Kelly directed each group and earned the distinction of overseeing the largest archeological field party in the United States. The National Park Service continued the use of relief labor in 1936, and in 1937 additional labor was provided through the Civilian Conservation Corps (CCC). The CCC began work at Ocmulgee in May 1937 and employed about 200 young men. The men of camp NW-4 (Company 1426) performed many functions during their five year stay at the monument, including road and parking area construction, levee construction at Lamar, lab work at the Macon Municipal Auditorium where artifacts were housed, and construction of a protective shelter over the Funeral Mound. The CCC was also responsible for guiding visitors, planting vegetation along nature trails, and conducting work on the earth lodge. The CCC continued to work at the monument until July 1942 when funds and labor decreased due to World War II.

Cultural Anthropology

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research exists to understand the relationship of the park's ethnographic resources and the historic contexts		An Ethnographic Overview and Assessment study is in progress (2013). The park needs a Cultural Affiliation Study. Ocmulgee NM is within the first Traditional Cultural Property (TCP) designated east of the Mississippi River. Listed in 1999 as an overlay district, the TCP includes the entire park and surrounding land to the east of the river.
	Appropriate studies and consultations document ethnographic resources and uses with regards to the park.		The park has the following resources: • William Bartram writings about the Ocmulgee Old Fields • Tribal (Muscogee Creek) oral histories • Oral histories with African American women who excavated the Swift Creek site • Desoto chronicles • Over 5,000 minutes of ambient sound recordings

Cultural Landscapes

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research exists to understand the relationship of the park cultural landscapes to the historic contexts of the park.		There is sufficient research to provide an understanding of the relationship between the park's cultural landscapes and historic contexts to a certain extent. Yet with this being a prehistoric site, information is limited for that particular context, and this relationship could benefit from further study. A Special Resource Study on Vegetation History was completed in August 2007.

	Adequate research exists to document and preserve the cultural landscape of the park.		The 2007 Cultural Landscape Report provides approved treatment plans for the park. Preservation is the primary treatment option with rehabilitation prescribed for certain character-defining features. The main park unit has a landscape plan that was done in the 1930s and which is being maintained except for the wooden fence (replaced with a chain link fence).
Inventory	The scope of cultural landscapes in the park is understood and a determination has been made whether or not they are a fundamental resource.		Both of the park's cultural landscapes are considered fundamental resources, with each having an approved management category of 'Must be Preserved and Maintained.'
	Percentage of landscapes eligible for the National Register with accurate, complete, and reliable Cultural Landscape Inventory (CLI) data.		100%—Both of the park's cultural landscapes have accurate, complete and reliable data. Ocmulgee NM Landscape is in Good condition, and the Lamar Site is in Poor condition.
Documentation	Percentage of cultural landscapes with adequate National Register documentation.		Ocmulgee NM is listed in the National Register, and the park's cultural landscape is adequately documented in most aspects. However, the significance of New Deal era resources, particularly those built by the CCC, needs to be added into the nomination. The National Register boundary needs to be increased to encompass newly acquired tracts such as Drake's field.

Historic Structures

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Percentage of historic structures evaluated using appropriate historical contexts.		• The reconstructed Mississippian earth lodge is the only one in the NPS system (HSR 2005). • The Macon plateau Mississippian Period earth mounds represent the largest assemblage in the NPS. • The Lamar period Mississippian village and mounds are the "type site" for the Lamar culture. The only known spiral mound is protected within this assemblage (Mound B). • Art Moderne Visitor Center—the only one in the NPS (HSR 2009); suggested as candidate for NHL listing. • Dunlap House (HSR 2011), an antebellum structure significant as the original park headquarters. • Creek Indian village/historic British trading post—archeological remains show evidence of the interaction between American Indians and Europeans. • Civil War earthworks represent the only Civil War skirmishes around Macon, GA. • CCC Camp archeological site. • Residence B is a Mission 66 structure and should be

			evaluated for NR eligibility.
Documentation	Percentage of historic structures with adequate National Register documentation. All historic structures have been recorded commensurate with their significance and mandated purposes.		Historic Structure Reports (HSRs) have been completed for the Earthlodge, Visitor Center, and Dunlap House. Funding requests have been submitted to develop HSRs for the Lamar site and the eight mounds at the main park unit. LCS information is current for 18 structures.
Condition	Percentage of historic structures in good condition		Only two of the park's five historic structures are in good condition. Dunlap House is in poor condition because of the 2011 arson fire. The Lamar site is in fair condition because of flooding. The Art Moderne visitor center condition is in Fair and deteriorating condition because of the deteriorating roof covering and resulting water leaks (fair condition). Deterioration of the earthlodge floor has occurred since original excavation. Drying of the soil has caused cracking and mold growth has been an occasional problem.

Resource Brief: The Spiral Mound

Lamar Mound B, also known as the Spiral Mound, is unique in North American pre-historic earth mounds. Instead of the common ramp leading to the mound summit, a ramp circles the mound clockwise in four complete traverses. Nothing is known regarding the reasons for this unique structure, and no other example of this type of construction exists. The Lamar site consists of a small village with two mounds, located along the Ocmulgee River about 2.5 miles south of the park's Main unit. When uncovered during the 1930s excavations, the site was the first of its kind to be discovered and thereby became the "type site" for the Lamar which was a wide-spread Late Mississippian culture in the Southeast from 1300 until 1650. The Lamar village itself was dated to approximately 1350 and was inhabited into the 1600s. It is believed that the Spanish explorer De Soto visited the site in 1540.

Following the exposure to Europeans, southeastern Indians experienced epidemic diseases which reduced the population by 75%. In this area, the survivors reorganized themselves into the groups known to the first English explorers as the Creeks.

Resource Brief: The Earthlodge

First identified as Mound D, this feature was correctly identified as an earthlodge upon excavation. A common part of a Mississippian site, the earthlodge at the park is the largest and earliest of nine such structures that were discovered in Bibb County, Georgia in the 1930s (National Park Service 2005). Typically each earthlodge is built upon the last, destroying its predecessor during construction. Seven earthlodges were found adjacent to the Great Temple Mound at Ocmulgee and two were found in separate locations on the middle plateau.

Shortly after excavations began it was found that the earthlodge was of finer construction than others. Its nearly perfect circle with fifty seats, fire pit and raised platform was in an excellent state of preservation. A fire had destroyed the chamber and the collapse of the roof had saved the floor for posterity. The platform, containing three seats, was formed in the shape of a bird's body, with the eye bearing the forked eye symbol. This symbol, common throughout the southeast, is part of the "southern cult," and is believed to be part of the spiritual belief system of the Mississippians. Today, the meaning of these symbols is lost.

Due to its preserved state, a decision was made to reconstruct the earthlodge. The work was completed by the CCC Camp then on site. Today the reconstruction is considered very speculative, but is important as an example of early historic preservation efforts in the United States. More important perhaps, the walls and roof of the reconstruction have protected the original floor, carbon dated to 1016, for all to enjoy.

Resource Brief: Ocmulgee Visitor Center

Among the list of unique components of the Ocmulgee National Monument is the Visitor Center, the only Art Moderne building in the National Park System. Designed by NPS Architect James T. Swanson, the building is an excellent example of the style, which grew out of the more well-known Art Deco, and was popular in the 1930s. The style is characterized by smooth surfaces, curving corners and a horizontal effect. The building is a showplace of the Art Moderne style with smooth concrete surfaces, rounded corners, and glass block wrapping the entrance. A deep red frieze near the roof line depicts a stylized Lamar pottery design. Beyond its design, the building also broke with NPS tradition in being a multi-purpose structure that served as the park headquarters, visitor center, museum, and artifact storage facility.

Construction was begun in May, 1938, with the work being completed by CCC and WPA crews. Work continued until December 7, 1941. At that time estimates of the completion status ranged from 55 to 65%. Temporary exhibits were put in place and the building was opened to the public. Despite promises of quick action, the building remained unfinished for many years after the end of World War II. Finally in 1950, funds were appropriated and work began again on the Visitor Center. In June, 1951, the Superintendent accepted the work and the staff moved in. Sixty-two years later the building remains special and stills serves the purposes for which it was designed.

History

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand significance of site.		The Administrative History (1985) needs to be updated. All the National Register documentation needs to be updated. A Historic Resources Plan was completed in 1977. List of Classified Structure (LCS) data is current.
	Sufficient research is conducted to establish the reasons for park creation and site history.		The park still requires a Historic Resource Study and an updated Administrative History.
	Research at the appropriate level precedes planning decisions involving cultural resources.		The appropriate level of research does not precede planning decisions involving cultural resources.
Inventory	Percentage of cultural resources listed in appropriate Servicewide inventories, including the National Register.		60%—Of the 18 structures entered on the List of Classified Structures for OCMU, 12 are in "Good" condition and 6 are in "Fair" condition. All contributing structures listed in the National Register for the historic district are listed and tracked in the List of Classified Structures (LCS).
Documentation	Percentage of historic properties with adequate National Register documentation or with Determinations of Eligibility.		60%—Each of the park's 18 historic structures was documented for the National Register and contributes to the Ocmulgee National Monument Historic District. The district was originally listed in 1976. In 1996 an amendment was submitted to and accepted by the Keeper. Of the 18 structure listed in the LCS, 14 have national significance, 2 have state significance, 1 has local significance, 1 is contributing.

Resource Brief: Significance of the OCMU Archeological Collection

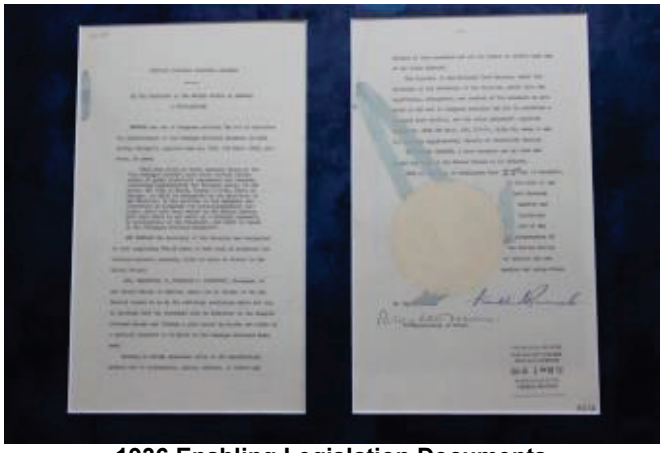
Ocmulgee National Monument and related sites are the stewards of one of the largest and most complete archeological collections in the United States, which is very significant to the study of Georgia prehistory and history and to the histories of the Indian tribes who lived in the Southeast. The large workforces involved in the archeological work during the 1930s work relief project excavated huge areas within the two units of the park, as well as major excavations at other prehistoric archeological sites in Georgia. The integrity and research value of these collections has suffered somewhat in the 70 years since the vast majority of excavation was done at the park, but the core of the collections has remained intact, and can be researched both at OCMU and at outside institutions. The NPS Southeast Archeological Center (SEAC) has finding aids for all OCMU collections stored at SEAC.

The vast majority of the original project documentation for the excavations is intact and is currently managed at SEAC. Not the least of this documentation is the original catalog cards created by the archeological laboratory in Macon during the 1930s and early 1940s. The cards are the original attempt at collections management by the directors of the early projects. The large workforce assigned to the project through the work relief agencies was not only excavating, but was also put to work analyzing and documenting the resulting collections, and reconstructing ceramic vessels. The WPA Catalog and the field notes and other

documentation from these early excavations are invaluable in providing researchers with crucial information about the sites and their features and contents, and are critical to the current NPS effort to account for and catalog poorly documented collections (Backlog Cataloging). As the designated Regional Repository, SEAC maintains the WPA cards as a part of the documentation that belongs with the collections. A current park goal is to bring copies of the WPA cards to the park for collection reference and researcher access and as part of the archival record for the park. The park also wants to bring WPA-era collections that were cataloged to WPA standards to NPS standards as time and funding allows. It is known that some artifacts from the 1930s excavations are now curated at the Smithsonian Institution's Museum of Natural History. Considering the amount of time that has elapsed since these excavations were carried out, the collections are remarkably intact. Backlog cataloging of OCMU collections has been ongoing for the past 20 years at SEAC. At current funding levels, it would require approximately 35 years to complete the entire OCMU backlog. Current funding trends do not support this goal, yet it is a critical park resource as well as a legal requirement of Federal property management and resource stewardship.

Resource Brief: Park Archives

The archival holdings of Ocmulgee National Monument are an important addition to the history of southeastern archeology, and prehistory in central Georgia. OCMU took an early initiative to identify and eliminate its archival backlog. Nearly 100 percent of OCMU accessioned archival materials have been housed in archival quality containers and cataloged in the NPS Interior Collection Management System (ICMS), which is a considerable achievement. The accessioned backlog remaining is almost entirely at SEAC. In addition, OCMU has developed simple finding aids to provide an additional level of reference access.



1936 Enabling Legislation Documents

The park still has a large number of files (approx. 64,000 archives) to be surveyed and then processed and cataloged. There is a critical need to digitize the early reports for accessibility and preservation. Selected archives and photographs, as well as the WPA cards need to be scanned. OCMU archives at SEAC have been fully indexed and cataloged, and are searchable and able to be used by researchers. Oversized maps are currently being indexed and should be completed within the fiscal year as a part of SEAC's multi-year, multipark, archives project. All oversized OCMU documents were surveyed by a paper conservator between 2007 and 2011 with more than 100 maps and drawings either having been conserved or scheduled for conservation this fiscal year.

The park archive is the repository for manuscript and personal papers collections donated to the park, research project files, and for all resource management records. Resource management records consist of records created by all branches of the park's organization chart. Official park records can be generated by park staff or by contractors, volunteers and others working within and for the park. The park archives contain retired central files, facility management project files, interpretive program records, scientific research conducted under permit in the park, and archeological field notes. Over time, the resource management records collection will constitute the bulk of the park's archival holdings. All staff in all program areas creates permanent park records and will continue to do so as long as the park continues its legal mandate to preserve uninterrupted the natural and cultural resources of the OCMU. As staff and park programs change over time, the records they leave behind in the archives serve as the uninterrupted institutional memory of the park.

Systematic records management and further development of the park archives program will permanently preserve vital resource management records, improve accessibility, promote and complement park initiatives, and support all program areas. In many ways, a park's archives are the common thread that all park programs share. All park programs are vested in the preservation, protection, and accessibility of the archival collections.

Museum Collections

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Inventory	The scope of museum collections in the park is understood. All resources have been		The Scope of Collections Statement was completed in July 2010. It is supported by the Enabling Legislation, resource management goals and objectives, interpretive themes, and the General Management Plan.

	surveyed to determine their appropriateness for inclusion in the museum/archive collection.		
	Percentage of objects accessioned and cataloged		Only 31% (808,697 of 2,575,130) of the more than 2.5 Million objects and archives are accessioned and cataloged (FY 2013 Collection Management Report).
Documentation	Park has current and appropriate baseline documentation (Scope of Collections Statement, Collection Management Plan, Housekeeping Plan(s), IPM Plan(s), EOP, Security and Fire Safety Plan(s), and Conservation Survey(s).		• An exhibit plan for the Visitor Center was completed in 2008. • The earth lodge does not have a furnishing plan or an exhibit plan. • Scope of Collections Statement was reviewed and updated in FY2010. • Museum Fire and Security Survey was completed 1/4/2010. • The Collection Management Plan was completed 10/18/2010. • Collection Condition Surveys have been conducted (1993, 1995, but are out of date. • An original painting of the excavations from the 1930s is undergoing conservation in FY2014. • The park does not have an Integrated Pest Management Plan. • The park does not have a Housekeeping Plan. • The park's archives were surveyed most recently in FY2011 and processed in FY2012. • The park does not have a Museum Emergency Operations Plan. • The park does not have a Collection Storage Plan.
Condition	Overall condition of the collection based on condition survey and improvements to storage.		The condition and status of the museum collections is considered a key park-wide issue. Collections are at risk, their value for research purposes is diminished, and visitor experience is affected. The museum collections are identified as a fundamental resource in the OCMU Foundation Document.

2.3. Visitor Experience

Visitor Numbers and Visitor Satisfaction

web

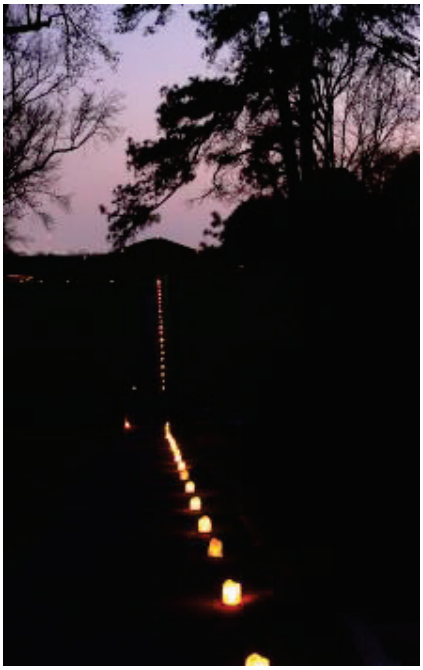
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Number of Visitors	Number of visitors per year		The total of 120,025 visitors to the park in 2012 was 7% higher than the 5-year average of 111,993 visitors for 2007–2011.
Visitor Satisfaction	Percent of visitors who were satisfied with their visit		Based on the standard visitor satisfaction survey conducted each year, the percentage of visitors satisfied in 2012 was 96.0%, similar to the 5-year average of 97.0% for 2007–2011. Source: 2012 Visitor Survey Card Data Report

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

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Education Programs	Number and quality of programs, and number of participants		The park education programs have varied over the past five years due to local county budget cuts. The Georgia State curriculum has changed their mandate and no longer cover Native American culture as much. In 2012, 3,000 fewer school children participated than in 2011.
Ranger Programs	Number and quality of programs and attendance		Over the past 5 years Ranger programs have increased in the number of programs offered annually and the attendance of the programs. In the past four years the park has participated in the Teacher Ranger Teacher program which has increased programming.
Junior Ranger Programs	Number of programs and attendance		The Junior Ranger program participation has increased steadily, with more than 2,000 children receiving the Junior Ranger badge during the past 5 years.
Special Events	Variety and longevity of events, community involvement		The park's special event programming has increased over the past five years with additional programs being added to the calendar of events. The Ocmulgee Indian Celebration has been held for the past 23 years. In 2012 the park had a record visitation of 19,500 visitors during the 3-day event. The park's Lantern Light Tour has been conducted for the past 30 years with hundreds visiting annually. Children's Summer Workshop has been held for over 25 years with 100 children participating every year. The park has added a 5K race, Ocmulgee to Okmulgee Bike Ride, and a glow in the park night walk within the last five years. Park staff is participating in the Civil War 150th anniversary.

Resource Brief: Ocmulgee Indian Celebration



Ocmulgee Indian Celebration is the principal ethnographic event of the year at the park. The Indian Celebration presents a free educational event for all school age children in the Central Georgia Area. The event is a modestly priced public educational event for the general public. The event features a wide variety of traditional and contemporary Native American dancing, music, arts, crafts, storytelling, history, and period encampments by American Indians, who present and interpret their own cultures. In 2012 the event had a record visitation of 19,500 people during the three day event.

Resource Brief: Lantern Light Tours

The Lantern Light Tours are part of the Cherry Blossom Festival that takes place in March. The tours started a year after the festival was created. During the past 5 years the tour has included both self-guided and Ranger-guided options that have allowed a greater number of people to participate. The event occurs over six nights during a two-week period, with approximately 800 participants each year during the past 4 years.

Interpretive Media – Brochures, Exhibits, Signs, and Website

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Wayside Signs	Condition and currency of signs		The park has replaced 5 outdated wayside signs and added 21 new waysides in the past five years.
Park Directional Signs (off-site)	Usefulness, quantity, and placement		Improvements could be made to the directional signs by making them larger and placing them in better locations.
Exhibits	Visitor Center		The Visitor Center exhibits were updated in 2009. The exhibits are interactive for visitors to learn and experience the history and culture of the park. The exhibits are handicap accessible for visitors.

	Earth Lodge		In 2009 the audio interpretation in the earth lodge was updated and improved, and the carpet in the earth lodge was replaced in 2012.
Print Media	Accuracy and availability of primary park publications		Text in the park brochure was updated in 2011, but the map needs to be updated. The rack cards and site bulletins are current.
Audio-visual Media	Orientation Films		The park orientation film will be improved to High Definition within the next 6 months, and there will be added computer graphics within the next year.
	Other AV material		All audiovisual media in the park was redone in 2009.
Websites	Currency and scope of website; number of website visitors		The website is updated on a regular basis and is visited by thousands of visitors annually.
	Social media: Facebook updates and "likes," overall activity		The park added social media to its interpretation program in 2012. We have about 1,000 likes in the past 10 months. In 2012 the park added twitter and has obtained 150 followers in the past 6 months. The park posts and tweets on a daily basis.

Accessibility

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Mobility	ADA compliance		The Visitor Center is ADA accessible.
Auditory accommodation	ADA compliance		The park orientation film has closed caption.
Public transportation	Access to park via public transportation		City buses have a stop at the park entrance, but service is unreliable.
Multi-lingual resources	Audio and print materials in multiple languages; Bi-lingual staff		The park brochure is made available in 15 different major languages. One park staff member speaks German and French as well as English.

Safety

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Number of law enforcement incidents	Number of law enforcement contacts or violations		The average number of law enforcement incidents per year is 42, with the majority occurring during Special Use Permitted Events when there is a much higher number of visitors to the park. As a result of law enforcement investigations and protection, there have been only 3 incidents of looting of artifacts during the past 25 years and none during the past 5 years.
Number of accidents or injuries	First Aid, EMS		An average of 17 injuries per year has occurred in the past 5 years, with many of these occurring during special events such as the 5K run through the park. Park staff receives CPR and AED training annually, and the response time from local emergency medical services personnel is 5 minutes.

Partnerships

web

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Volunteers	Number and hours contributed		In 2012, 660 volunteers contributed more than 4,000 hours to help with park stewardship. The number of volunteers and volunteer hours has remained stable during the past five years.
Partnerships	Number of official and unofficial partnerships		The park maintains an average of 15 partners each year for the Indian Celebration. New partnerships have been developed each year for other programs and activities.

2.4. Park Infrastructure

Overall Facility Condition Index

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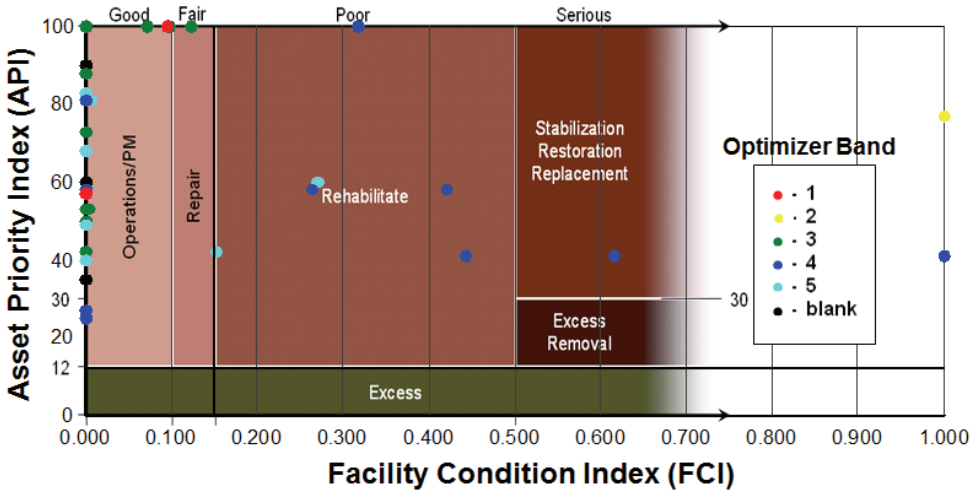
The National Park Service uses a facility condition index (FCI) to indicate the condition of its facilities and infrastructure. FCI is the cost of repairing an asset, such as a building, road, trail, or water system, divided by the cost of replacing it. The lower the FCI number, the better the condition 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 2008 / 2012	FCI 2008 / 2012	Condition Status/Trend	Rationale
Buildings	8 / 8	0.025 / 0.085		The condition of buildings includes eight buildings that are listed as assets in the FMSS database. Improvements are being made to the park's heating and air conditioning system for the Visitor/Administration building to improve energy efficiency.
Campgrounds	0 / 1	------- / 0.000		The Volunteer RV campsite is equipped with electricity and running water for overnight RV use.
Trails	13 / 14	0.099 / 0.000		The park's 14 trails and pedestrian bridge are in good overall condition. The pedestrian bridge passed the recent inspection by the Federal Highways Department.
Water Systems	1 / 1	0.000 / 0.000		The park's water system provides water for the park buildings, sprinkler system, and for fire hydrants throughout the park.
Paved Roads, Parking Areas, Bridges, Tunnels	9 / 11	0.449 / 0.771		Most of the park roads and parking areas are in poor condition and are in need of repair. The park has requested funding for the repairs.
All Others	20 / 27	0.018 / 0.002		This category includes the park's radio, phone, and computer systems; the earth mounds; wayside exhibits, and picnic area, which overall are in good condition.

Another important facilities management planning tool used at a park is the Asset Priority Index (API). It identifies the importance of the various infrastructure components at a park. The API is determined using five criteria, and is calculated out of 100 possible points. The criteria are weighted based on their importance to NPS core priorities. They are distinct to ensure that each aspect of the asset is measured independently. As a result, most assets will not rate high in every category.

The scatterplot (below) for 2012 shows the FCI for each of the infrastructure asset types at Ocmulgee National Monument. It plots buildings, trails, roads, parking areas, and other infrastructure assets against its Asset Priority Index (API). Park managers and maintenance staff use the FCI and API data for each park asset to focus on preventive maintenance and repairs to facilities that are most critical to their parks.



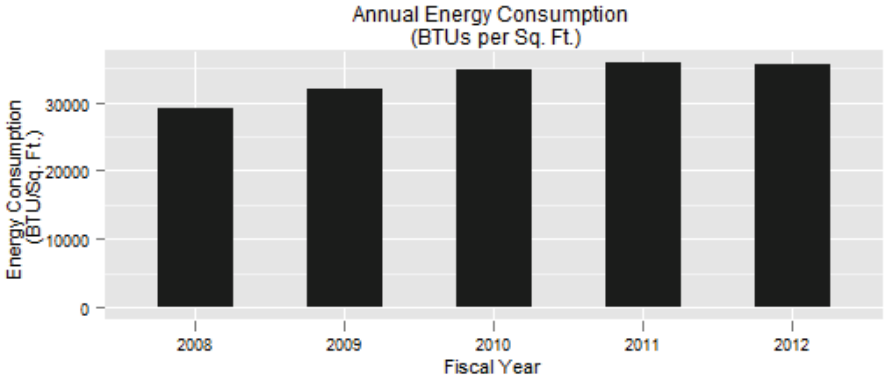
Optimizer bands—the color of the dots in the scatterplot—are assigned to each facility or asset as a tool to prioritize use of limited funding to maintain park infrastructure. Optimizer Band 1 includes those assets with the highest maintenance priorities. These assets are most important to the park—often linked to the park's enabling legislation or have high visitor use—and usually are in the best condition. Band 1 assets receive the highest percentage of base funding for routine operations, preventive maintenance, and recurring maintenance to keep them in good condition with proactive, planned maintenance. These assets are important to park operations, but because fewer park base dollars are available after maintaining Band 1 assets, Band 2 assets receive a lesser percentage of remaining funds. Assets in the lower priority bands may only receive preventive maintenance for the most critical components or may require special projects or partner funding to maintain them. For additional information about optimizer bands and how park managers use them to make decisions about the efficient use of funding for maintenance and restoration activities at the park, Click Here.

Energy Consumption

web

The production of energy to heat, cool, and illuminate buildings and to operate water utility systems is one of the largest contributors to greenhouse gas emissions in the United States. The National Park Service is committed to improving facility energy performance and increasing its reliance on renewable energy sources. The National Park Service has a goal to reduce Servicewide building energy consumption per square foot of building space by 35% by 2016 from the baseline set in 2003 (NPS Green Parks Plan 2012).

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Energy Consumption	BTUs per gross square footage of buildings		Energy usage (BTUs per gross square footage of buildings) at the park in 2012 was 8 % higher than the average for the previous 4 years (Source: NPS Annual Energy Report).



Water Consumption

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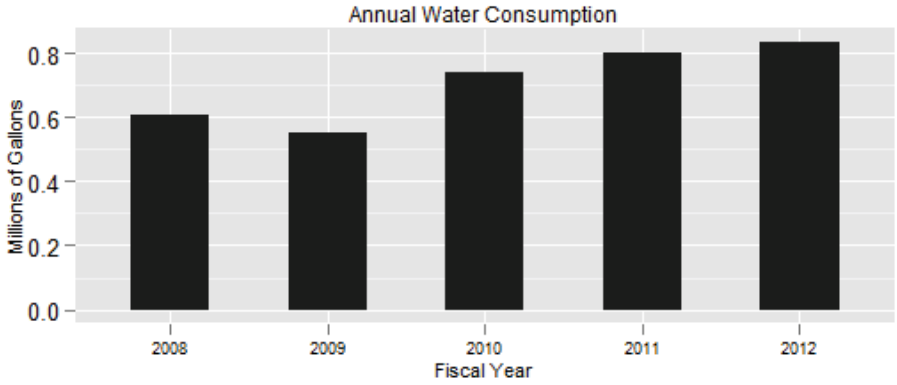
The national and global supply of fresh water has diminished in recent decades, and this trend is likely to continue due to drought and other climatic changes. To contribute to the responsible use of freshwater supplies, encourage groundwater recharge, and protect water quality, the National Park Service is improving its efforts to conserve water, reuse gray water, and capture rainwater, and has set a goal to reduce non-irrigation potable water use intensity by 30% by 2020 from the baseline set in 2007 (NPS Green Parks Plan 2012).

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Water Consumption	Millions of gallons		Water consumption at the park in 2012 was 23.6% higher than the 4-year average for 2008–2011 (Source: NPS Annual Energy Report). Higher water use was needed to establish a new area of grass for the Indian Celebration in 2012, and for landscaping during the recent drought.



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:

Tribal Relationships

- Ongoing efforts by park staff to build and improve relationships with Native American tribes. The park consults with the tribes on a variety of park activities.
- The Ocmulgee Indian Celebration has been held for the past 23 years, and in 2012 had a record high of 19,500 attendants during the 3-day event.
- Successfully partnered with tribal officials of the Muscogee (Creek) Nation to commemorate their Trail of Tears with an Ocmulgee National Monument to Okmulgee, Oklahoma bike ride.
- Planning and design of the new exhibits in the Visitor Center was done in consultation with the 12 federally recognized tribes.

Natural Resources

- More than 200 acres in the park have been surveyed and cleared of exotic vegetation during the past 5 years.
- Completion of basic natural resource inventories and initiation of long-term monitoring of a subset of the park's natural resources by the Southeast Coast Inventory and Monitoring Network (SECN).
- Completion of a draft Natural Resource Condition Assessment to evaluate and summarize existing natural resource data for the park.

Cultural Resources

- Park staff and contractors have catalogued and processed 564,766 museum objects and archives in the past five years and have provided increased access to the museum collection by researchers. The number of research requests has tripled as a result of the increased accessibility of the collection.
- Following the February 2011 arson fire, the park funded an Architectural and Engineering study that will be required for restoration of the historic Dunlap House. Successfully worked with local authorities to prosecute and convict the arsonist.
- Onsite storage facilities were completely reorganized to enhance and improve the preservation of the museum collection.
- Trees were removed from Mound A in the Lamar Unit to protect the cultural resources.
- Removed trees from Civil War earthwork.

Visitor Experience

- 21 new wayside exhibits have been developed and placed in the park in the past five years.
- A cell phone interpretive tour was developed that allows visitors to use their cell phone as they tour the park to learn about specific features and locations.
- Park staff has increased the number of programs provided to local schools.
- The park participates in the Teacher – Ranger – Teacher program.
- Updates have been made to the park website, and the park has established Facebook and Twitter pages for social media.
- Approximately 50 site bulletins have been developed in the past several years.
- Junior Ranger program packets have been updated.
- Commemorated the 75th anniversary of the park through 3 special events during December 2011.
- The park was successful in receiving two National Park Foundation grants for urban youth involvement and the Get Outdoors program.
- Made improvements to the Lantern Light Program, which has been conducted for more than 30 years, to be able to accommodate additional participants.

Park Infrastructure

- Part of the HVAC system for the park Visitor Center and Administration Building was recently replaced to improve energy efficiency. The park has already seen a large decrease in energy costs because of the improvements.
- To reduce safety risks to park staff and to save money, the park purchased a remote-control mower to maintain the steep slopes on the Great Temple Mound and other areas.
- More than 6 miles of hiking trails in the park are routinely maintained by park staff.
- Park restrooms were fitted with low-flow fixtures to reduce water consumption.
- Replaced park vehicle with a hybrid vehicle, and other vehicles use flex fuel. The park's diesel vehicles have been converted to bio-diesel.
- Modifications made to offices to provide high-speed internet access for all staff.
- Converted one of the park houses to dormitory-style housing to accommodate seasonal employees and interns.

Park Planning

- Development of a Foundation Document to assist in long-term park planning.
- Development of a long-term Interpretative Plan for the park.
- Studies in progress to determine the feasibility of a boundary adjustment that would physically link the Lamar Unit with the main unit of the park, and would fulfill the original authorized 2,000 acre park.
- Updated Wildland Fire Management Plan for the park.

Partnerships

- The park is partnering with several organizations to develop a Greenway Trail along the Ocmulgee River, which will provide access to the park and to the riverfront. The park has completed compliance documentation and the project is ready to start.
- The park is involved in an ongoing community partnership to celebrate Earth Day.

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

Ocmulgee National Monument preserves lands that are very sacred to many Native American Peoples, and is located next to and partially in a city of more than 91,000 people. It has world class cultural resources and a great variety of natural resources. It is unique in having a documented 12,000 plus years of habitation. Thus, there are issues affecting these various components.

Cultural Resources:
Ocmulgee National Monument has the largest museum collection in the National Park Service according to the Regional Curator. There are an estimated 2.5 million objects in the collection, the vast majority of which are uncatalogued. Without knowing what is there we have no idea what information they may hold that would affect our interpretation of the site. In addition, the collection is of little use as a research tool. Most of the collection dates back to the 1930s; thus, this problem has existed for over 70 years.

Over the years, the Ocmulgee site has become largely forgotten within the scientific community. The recent research and dissertation by Dr. Daniel Bigman was the first such work conducted at the site in decades. Thus interpretation and the visitor experience are adversely affected by the lack of modern scientific analysis of recovered and unrecovered resources.

Modern scientists have not responded well to NPS regulations which emphasize the preservation of archeological resources over their exploitation for limited research objectives. Similarly, the lack of a modern cataloging of the park's vast museum collection makes modern research difficult. When research does take place within the collections held at the Southeast Archeological Center, park staff is rarely advised and seldom informed regarding the results of this type of study.

The land we preserve is sacred to many Native American Peoples but that is especially true of the Muscogee (Creek) people. This area is considered to be where they first "sat down" as a people to establish their confederacy of tribes. It is this connection that also helped form the basis of the area being listed as a "Traditional Cultural Property" (TCP) on the National Register. Thus, it is vital that the park maintain a good government to government relationship with the associated federally recognized tribes to aid in the preservation and interpretation of the resource.

The park is in the process of working on a boundary adjustment study which could result in the park including approximately 2,700 additional acres of the TCP and complete the park as originally conceived. The boundary adjustment would physically link the two units of the park, preserve and protect the "Ocmulgee Old Fields", an important archeological area, and would fulfill the original authorized 2,000 acre park.

The park has a separate unit, the Lamar Unit, which contains two mounds, one of which is unique in all of North America. The "spiral mound" has a spiral ramp that wraps around the mound to the top, instead of the typical ramp that goes straight up one side. Access to this site is difficult for both the staff and visitor, and there is no access during high water periods. This makes protection and preservation an issue and does not allow the public to see this important resource.

Natural Resources:
While for years the park was considered only a "cultural area", recent surveys have shown the area to have a significant variety of natural resources. Unfortunately the lack of expertise on staff to manage such resources is an issue. In addition the park has a significant exotic problem with both plants and animals. The shortage of staff and expertise leaves exotic control to one or two seasonal employees during the summer.

The lack of expertise on the natural resources has also helped lead to a lack of public and staff understanding of the natural resources of the park and the relationship of those resources to the human habitation over the 12,000+ years.

The hydrology of the park is not well understood. Areas that were once wet are now dry and vice versa. The drainage culvert under the park road has filled in dramatically; where 18 years ago there was a 5 foot culvert under the road, the culvert is now less than a foot wide and the road is washed over in heavy rains. There are concerns that eventually there will be a complete wash out of that road unless the drainage issues are corrected.

Visitor Interaction:
For generations, people living in the Macon area have known the park as the "Indian Mounds". When visitors ask for directions to Ocmulgee National Monument they often find no one to help them until they mention that they are looking for the place with the Indian Mounds, at which point the person can then help them. There have been attempts to rename the park Ocmulgee Mounds National Monument with hopes that with the inclusion of the "mounds" visitors will be assisted by the local people.

There is a perception that the park is a long way from downtown Macon since the entrance gate is on the opposite side of the park away from the city, while in reality it is quite close. There have been discussions on adding a second entrance to the park, one closer to downtown. There are several community leaders and politicians who are pushing the idea. This could well lead to additional visitors if the local people realize how close the park is and it is easy to access. There is a back gate that is used for maintenance access that may be able to be used, but there will need to be some evaluations done and other issues addressed.

Macon and Bibb County recently voted to consolidate their governments. This will lead to a new governmental unit that the park will have to interact with. In the past, the park has had a variety of relations with the Macon and Bibb County governmental bodies, sometimes good and sometimes challenging. While the relationship has been good for many years it will take some work to insure things stay on good footing with the new entity as it forms.

As funding continues to stay flat or decrease the park has become more dependent on working with partners. Our main partner is the Ocmulgee National Monument Association, which is the major outside funder of our annual Ocmulgee Indian Celebration and sells books and other items in the visitor center museum store. The Association has had steady growth recently, and has been able to cover some of the costs that the park cannot afford. We are already finding the need to reach out to them to aid us in finding more partners as our staffing and funding is reduced.

Infrastructure:
The park's infrastructure is aging. The road is cracking and failing, and the Visitor Center is more than 75 years old and has been having water intrusion issues for most of its existence. While the current roof structure has been one of the more successful ones, it is now failing and there is a constant intrusion of water after every rain. This is having effects on the museum exhibits and other items. There is also an issue with mold in the building due to the years of water intrusion. One regional office staff member in looking at the mold stated he felt if not corrected the mold issue could lead to the building not being inhabitable in the not too distant future. The park is working with the Regional Office in trying to correct the issue and find funds to pay for the solution.

On February 9, 2011 at around 3:00 a.m. an individual broke into the historic Dunlap House and started a fire in the back bedroom. Fortunately the Macon and Bibb County Fire Department responded quickly to the alarm and saved the structure from complete loss. Flame damage was kept to two areas with heat and smoke damage to the remainder of the structure. The house was built in 1857; it was occupied by Union forces during the 1864 Battle of Dunlap Hill. During the 1930s the house served as office and laboratory for the Smithsonian Archeologist, then served as the first visitor center and then from the early 1940s to 2006 as quarters for the Park Superintendent. Plans have been developed to repair the house and the park is waiting for funding to accomplish the needed work.

References

See the park's State of the Park Report 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:

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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)	Law enacted by the federal government that includes 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.

Cultural Landscape 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.
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 Program. The program supports 16 Exotic Plant Management Teams working in over 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.
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.
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.
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.
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.
Southeast Coast I&M Network (SECN)	One of 32 I&M networks established as part of the NPS Inventory and Monitoring Program. The Southeast Coast Network comprises 20 parks in Alabama, Florida, Georgia, North Carolina, and South Carolina.
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.
Visitor and Resource Protection (VRP)	VRP includes, among other responsibilities, protecting and preserving park natural and cultural resources, enforcing laws that protect people and the parks, fire management, search and rescue, managing large-scale incidents, and on-the-ground customer service.