



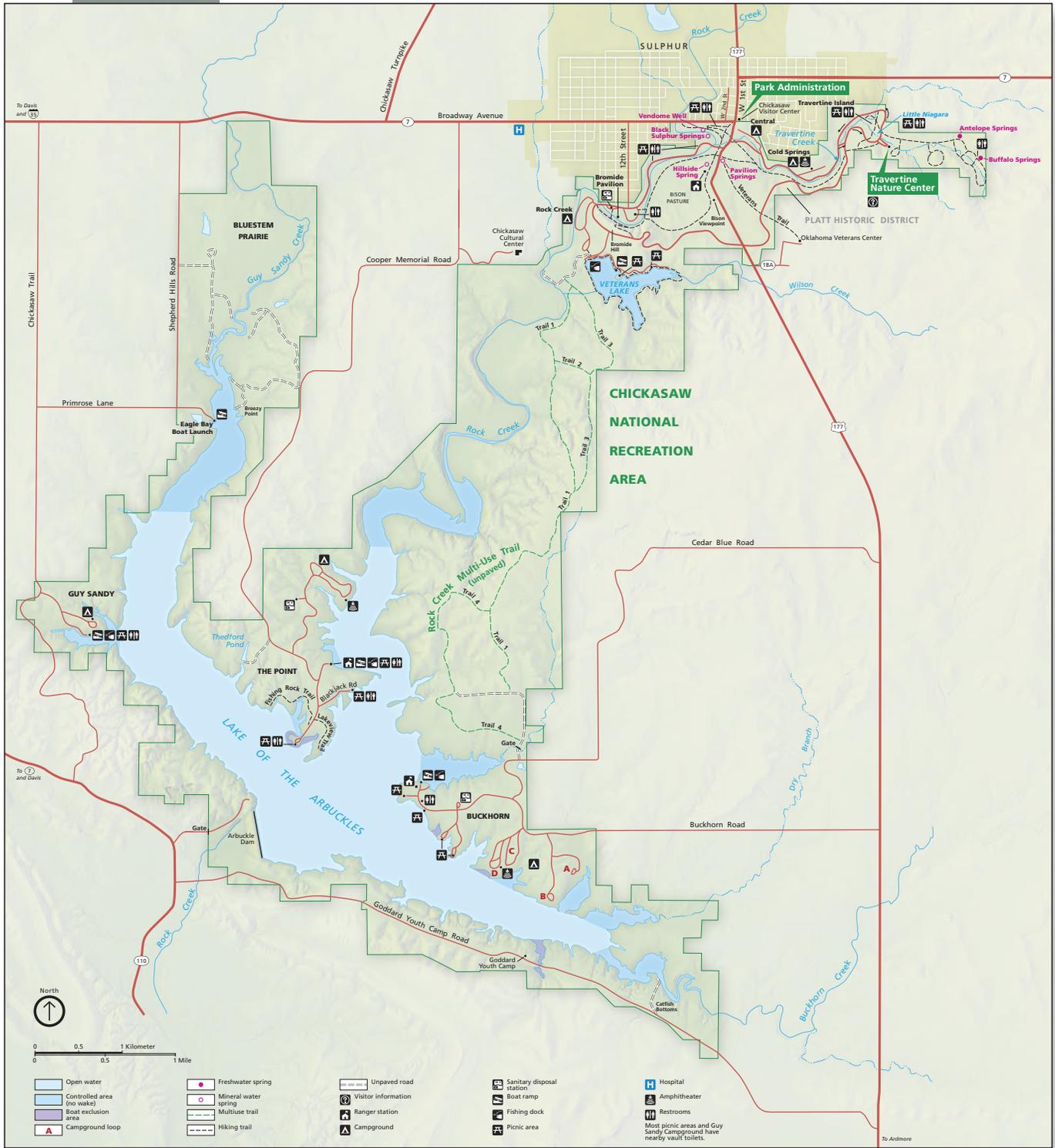
# Foundation Document

## Chickasaw National Recreation Area

Oklahoma

March 2017





To Ardmore

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## Mission of the National Park Service

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

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

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

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

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



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

## Introduction

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

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

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



## Part 1: Core Components

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

### Brief Description of the Park

Chickasaw National Recreation Area is in south-central Oklahoma, between Dallas, Texas, and Oklahoma City, Oklahoma. The recreation area was originally authorized in 1902 as Sulphur Springs Reservation and was renamed and redesignated as Platt National Park in 1906. In 1976, Platt National Park, Arbuckle National Recreation Area, and additional lands were combined to establish Chickasaw National Recreation Area (Public Law 94-235).

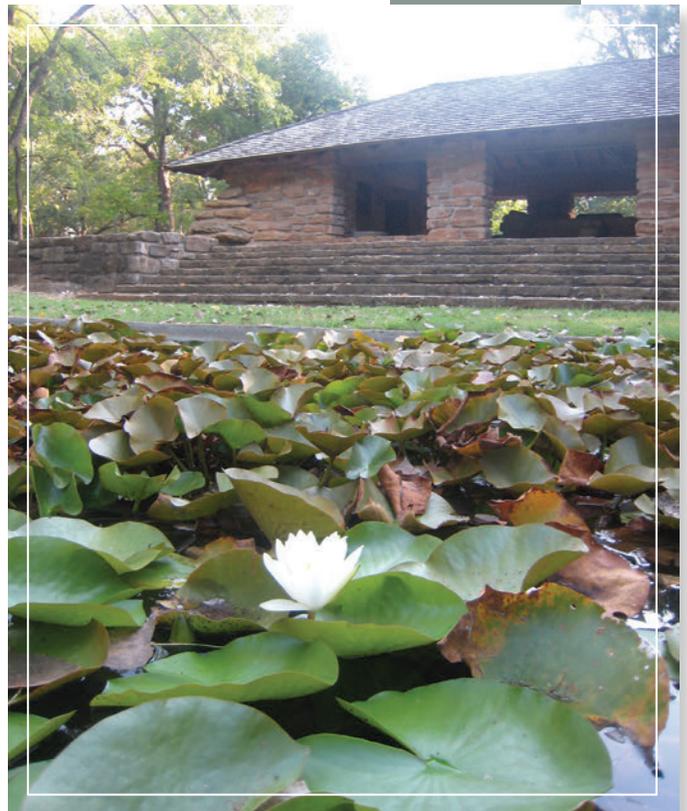
The recreation area is named after the Chickasaw Nation of Oklahoma. Originally inhabitants of western Kentucky and Tennessee and northern Mississippi and Alabama, the Chickasaw Nation was forced to move to Oklahoma Territory as part of the “Great Removal” of 1837. In 1902, the nation ceded portions of its land to the federal government. These lands became the Platt National Park and eventually Chickasaw National Recreation Area. The tribe continues to have traditional ties to these lands.

The springs and streams in Chickasaw National Recreation Area originate in a region of Oklahoma defined by complex geology. Intense faulting, folding, and deformation associated with major uplift and subsequent erosion has combined to form a land surface characterized by gently rolling hills dissected by streams. The springs and streams have had cultural, economic, and environmental importance throughout the region’s history.

The recreation area also contains iconic historic structures and infrastructure. Dating from the public works era of the 1930s, classic examples of NPS design and Civilian Conservation Corps (CCC) work can be found in the Platt National Park Historic District (Platt Historic District) of the recreation area. This area is a unique and fascinating piece of CCC development that has kept its integrity. The site work and landscape structures are elaborate and of high quality. The national historic landmark nomination for the Platt Historic District notes that the district contains one of the finest examples of CCC work in terms of rustic design, the number and variety of structures, and construction techniques and materials.

At Chickasaw National Recreation Area, eastern deciduous forests transition to western prairie grasslands, resulting in a diversity of natural resources. The recreation area supports flora and fauna from both environments, as well as some specific to transition areas. These distinctive flora, fauna, waters, and geological formations have withstood the external pressures of human impacts and natural changes. The combination of these resources has created an area unlike any in the surrounding region.

Chickasaw National Recreation Area provides opportunities to experience a wide range of outdoor experiences—swimming, boating, fishing, hiking, observing nature and scenery, hunting, camping, and picnicking. These outdoor experiences add immeasurably to the quality of life for visitors and area residents.



## Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Chickasaw National Recreation Area was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on March 17, 1976 (see appendix A for enabling legislation). The purpose statement lays the foundation for understanding what is most important about the park.

*The purpose of CHICKASAW NATIONAL RECREATION AREA is to protect its springs and waters; preserve areas of archeological and ethnological interests; provide outdoor recreation; allow for hunting and fishing; protect scenic, scientific, natural, and historic values; and memorialize the Chickasaw Nation.*

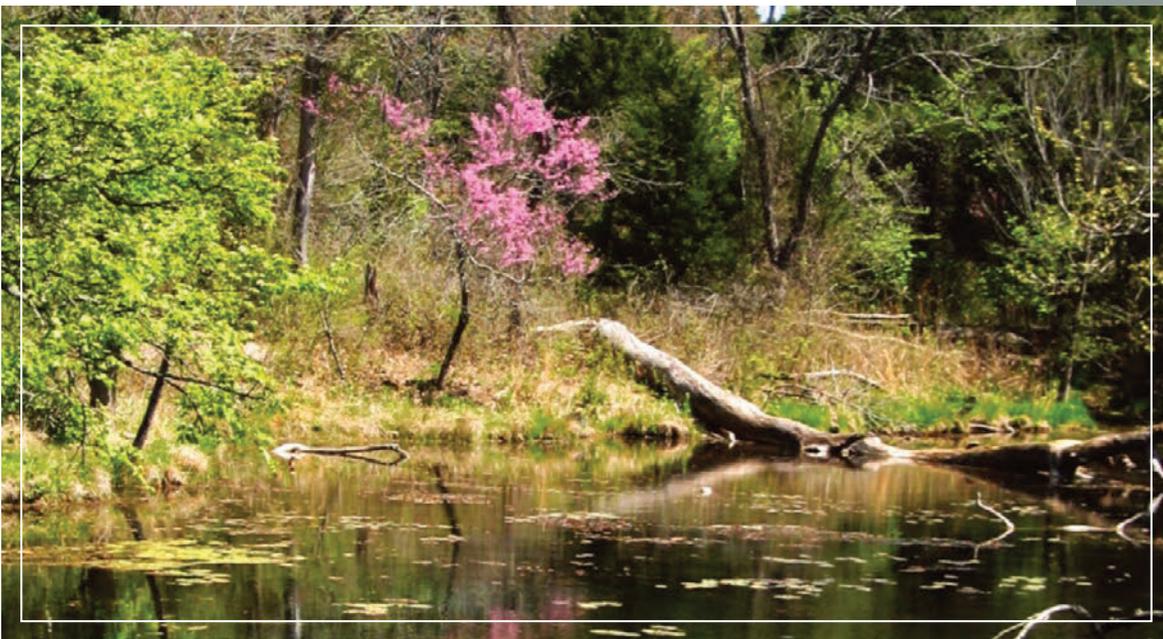


## Park Significance

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

The following significance statements have been identified for Chickasaw National Recreation Area. (Please note that the sequence of the statements does not reflect the level of significance.)

1. Chickasaw National Recreation Area is renowned for its unique concentration of freshwater and mineral springs and creeks that originate in the highly faulted and folded rocks of the Arbuckle-Simpson aquifer and have a long history of recreational and medicinal use.
2. Chickasaw National Recreation Area is home to a transition zone where the western prairies meet the eastern woodlands. This ecotone supports a richness and diversity of plant and animal species unique to the south-central part of the United States.
3. The nationally significant Platt National Park Historic District includes many historic structures and is one of the most intact cultural landscapes from the CCC primary era of significance (1933–1940) and exemplifies implementation of the National Park Service “rustic” designs.
4. Chickasaw National Recreation Area has provided a wide range of high-quality land- and water-based recreational opportunities for generations in a national park setting between Dallas-Fort Worth and Oklahoma City.
5. The transition from Sulphur Springs Reservation to Platt National Park to Chickasaw National Recreation Area (1902 to present) reflects the progressive changes in the national park system and how the American conservation movement continues to evolve.
6. The significance of renaming the area “Chickasaw” memorializes the Chickasaw Nation’s foresight to protect the freshwater and mineral springs through government versus private ownership.



## Fundamental Resources and Values

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

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

The following fundamental resources and values have been identified for Chickasaw National Recreation Area:

- **Water Resources and Geology.** Chickasaw National Recreation Area is in an uplifted area commonly referred to as the Arbuckle Mountains that is characterized by great thicknesses of ancient carbonate rocks, uplifts, folded structures, and large fault displacements. The history of the Arbuckle Mountains is preserved in rocks and geologic structures that span more than a billion years, from Proterozoic igneous and metamorphic rocks to Quaternary alluvial deposits. Such features include the steep cliffs of Bromide Hill—the dominant physical feature in the national recreation area. In addition, scenic waterfalls along Travertine Creek are formed from carbonate precipitates that include unique travertine deposits (a type of sedimentary rock) for which the creek is named.
- **Historic Landscape and Structures.** The park’s 200–300 historic structures—many of which are in the cultural landscape of the Platt Historic District—reflect the primary era of 1933–1940, during which the Civilian Conservation Corps implemented National Park Service “rustic” designs, and reflect one of the most intact landscapes of that period. Extensive park infrastructure designed and constructed during this time frame includes mineral spring pavilions, campgrounds, picnic areas, dams, and waterfalls. These facilities were linked by a network of roads and trails and complemented by an ambitious silviculture program that resulted in planting more than 500,000 trees and shrubs in the district. The CCC work group at Platt National Park was the largest and longest running of any in Oklahoma; about 200 workers were employed at any given time between 1933 and 1940.

Several other notable historic structures are in the Platt Historic District including the iconic Lincoln Bridge. Built in 1909, Lincoln Bridge was the first structure built in Platt National Park. It is in the southern part of Flower Park, adjacent to the boundary of the city of Sulphur. In addition, the Travertine Nature Center, built in 1969 and straddling Travertine Creek, was added to the National Register of Historic Places in 2011. Inspired by Frank Lloyd Wright’s style of architecture and reflective of the NPS Mission 66 program, it was the first nature center constructed by the National Park Service west of the Mississippi River.





- **Park History.** From ancient times to the present, access to the area’s cool water and mineral springs has created an experience that sets the area apart from the surrounding environment. Archeologists believe people have lived in the park’s vicinity for thousands of years, and ethnohistorical records indicate people called this place the “peaceful valley of rippling waters.” In 1855, after the federal government had moved major tribal populations from east of the Mississippi River to south-central Oklahoma, land that is now part of the national recreation area came under the control of the Chickasaw Nation. By the late 1890s, settlers had built the town of Sulphur Springs around the freshwater and mineral springs, and hotels and bathhouses promoted the medicinal qualities of the waters. Fearing the waters would suffer from uncontrolled use, members of the Chickasaw and Choctaw Nations and town residents worked with government officials to preserve the springs along Travertine and Rock Creeks. The area became Sulphur Springs Reservation and was expanded and renamed Platt National Park in 1906—one of the first places in the United States set aside for preservation and public enjoyment. In the 1930s, the Civilian Conservation Corps built many of the enduring pavilions, roads, trails, and waterfall structures that are enjoyed by park visitors today.

In 1976, Platt National Park, Arbuckle Recreation Area, and additional lands were combined to create the almost 10,000-acre recreation area. The long history of Chickasaw National Recreation Area further exemplifies the evolution of the American conservation movement and the national park system. The significance of naming the area “Chickasaw” is meant to memorialize the foresight that the Chickasaw Nation showed when they agreed to protect the natural freshwater and mineral water resources of this area through public government ownership rather than private ownership.

- **Recreational Opportunities.** An Oklahoma oasis of springs, streams, and lakes, Chickasaw National Recreation Area has provided generations of visitors with high-quality recreational opportunities and continues to offer a wide range of outdoor experiences. Favorite activities include swimming, boating, sailing, camping, fishing, hiking, horseback riding, hunting, observing nature and scenery, and picnicking.
- **Western Prairie / Eastern Woodlands Transition Zone.** Chickasaw National Recreation Area is in a transition zone where western prairies meet eastern deciduous forests. Its flora and fauna comprise a diverse mixture of species from both environments. More than 600 different plant species have been identified in the park. The area’s limestone-rich soils uniquely support grassland species in dry places and forest species in wetter stream and floodplain environments. The riparian environment supporting oak-hickory forests along Travertine, Rock Creek, Buckhorn, and Guy Sandy Creeks provide a great example of this regional “cross timbers” ecosystem.

## Interpretive Themes

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

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

The following interpretive themes were identified for Chickasaw National Recreation Area in the park’s 2011 comprehensive interpretive plan:

- Chickasaw National Recreation Area’s 500-million-year record of sedimentary deposition, complex hydrogeological system, and diverse flora and fauna foster enriched connections with the dynamic relationships among geology, water, and life.
- The attractive and intimate scale of the landscape, the wide range of recreational opportunities, the history of the freshwater and mineral springs, and the comfortable, rustic-built environment of Chickasaw National Recreation Area invite an exploration of the concepts of personal and societal health and well-being.
  - The transition from Sulphur Springs Reservation to Platt National Park to Chickasaw National Recreation Area (1902 to present) reflects the progressive changes in the national park system and how the American conservation movement continues to evolve and encourages investigation of man’s relationship with the environment.
  - The use of the name “Chickasaw” memorializes the Chickasaw Nation’s connection to the creation of the park and invites a study of history as it profoundly influences contemporary America.
- The eastern woodlands–western plains ecotone at Chickasaw National Recreation Area offers outstanding opportunities to appreciate the rich ecological relationships that nurture and sustain our civilization.



## Part 2: Dynamic Components

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

### Special Mandates and Administrative Commitments

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

#### Special Mandates

Under the enabling legislation for Chickasaw National Recreation Area (Public Law 94-235) the total acreage of Chickasaw National Recreation Area cannot exceed 10,000 acres. In addition, section 3 mandates that the National Park Service work with the Oklahoma Department of Fish and Wildlife (now the Oklahoma Department of Wildlife Conservation) on management of hunting and fishing in the park.

For more information about existing administrative commitments for Chickasaw National Recreation Area, please see appendix B.

### Assessment of Planning and Data Needs

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

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

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

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

#### Analysis of Fundamental Resources and Values

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

Fundamental Resource or Value	Water Resources and Geology
Related Significance Statements	Significance statements 1 and 6.
Current Conditions and Trends	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Three U.S. Geological Survey (USGS) stream gauges are in the park: Rock Creek, Travertine Creek, and Antelope Springs. The Chickasaw Nation funds the Antelope Springs gauge.</li> <li>• The USGS monitors two observation wells in the park.</li> <li>• Park staff monitors flow of springs, streams, and Vendome Well. Park staff monitors physical water quality parameters (pH, temperature, dissolved oxygen, and specific conductance) of springs, streams, Lake of the Arbuckles, and Veterans Lake. During summer months, staff samples for E. coli bacteria in swimming areas along Travertine Creek, Rock Creek, Lake of the Arbuckles, and Veterans Lake.</li> <li>• Many of the springs documented in 1906 no longer flow, and flows from the remaining mineral springs (Pavilion, Hillside, and Black Sulphur Springs) are substantially less than those reported in 1906. The decline in spring flow is attributed to a gradual lowering in the hydraulic head of the Arbuckle-Simpson aquifer caused by many years of uncontrolled discharge of flowing artesian wells in the vicinity of the city of Sulphur.</li> <li>• As of 2015, zebra mussels have not been documented in the park; however, some local lakes have zebra mussel problems.</li> <li>• Lake of the Arbuckles is on the State of Oklahoma’s impaired list (for “fish and wildlife propagation – warm water aquatic community”) due to low concentrations of dissolved oxygen during summer months but has relatively good water quality (e.g., clarity) and low nutrients as compared with other state waters.</li> <li>• The City of Sulphur obtains its water supply from wells completed in the Arbuckle-Simpson aquifer. The city’s well field is adjacent to the park boundary, just north of Travertine Island. Groundwater withdrawal from these wells reduces flow to Travertine Creek and its headwater springs (Antelope and Buffalo).</li> <li>• The park obtains some of its water supply from Lake of the Arbuckles and treats water supplies at point sources for transfer to the Buckhorn, Point, and Guy Sandy Campgrounds.</li> <li>• There is the periodic occurrence of cyanobacteria (blue-green algae) in Lake of the Arbuckles.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Spring flow at Pavilion and Hillside Springs is declining.</li> <li>• Flow of Antelope and Buffalo Springs correlates with seasonal and annual changes in precipitation. No long-term trends in flow or quality are apparent.</li> <li>• Discharge from Vendome Well has steadily declined from more than 2,500 gallons per minute when the well was drilled in 1922 to 500 gallons per minute in 1998. In 2009, the park installed an automatic valve to reduce the flow of Vendome Well during times when it was not being used or enjoyed by the public in order to conserve park and Arbuckle-Simpson aquifer resources.</li> <li>• Low flows (e.g., base flow from groundwater discharge) are declining.</li> <li>• Flow from Black Sulphur Springs may be improving, possibly due to the restricted flow of Vendome Well.</li> </ul>

Fundamental Resource or Value	Water Resources and Geology
Threats and Opportunities	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Groundwater withdrawals from pumped and flowing artesian wells.</li> <li>• Arbuckle-Simpson pit water from quarries—unused water is not regulated and water is being drained or lost through evaporation.</li> <li>• Prior groundwater rights of the City of Sulphur (1,120 acre-feet/year) and Oklahoma Gas &amp; Electric Corp. (OG&amp;E) (2,214 acre-feet/year) are not subject to the groundwater allocation of 0.2 acre-feet/year approved by the state in 2013. OG&amp;E has not exercised its prior right since 1988 when it shut down its power plant, but the right could potentially be used in the future.</li> <li>• Warmer temperatures, drought, and more large storms due to climate change may affect groundwater availability.</li> <li>• Changes in land uses (e.g., chicken farm pollutants north of the park).</li> <li>• City of Sulphur sewerline flowing through the park periodically leaks and has blockages that release sewage and bacteria in creeks and springs. Sewer management issues cause administrative and potentially legal challenges.</li> <li>• Potential spills and contamination from point and nonpoint sources (i.e., pollution sources from the watershed of Lake of the Arbuckles as well as airborne contaminant deposition including mercury, pesticides, and nitrogen).</li> <li>• Private septic systems in the Rock Creek watershed that can result in higher bacteria levels.</li> <li>• Potential introduction of nonnative aquatic species, such as zebra mussels, which would threaten the park's ecology and infrastructure.</li> <li>• Hydrilla, a highly undesirable invasive aquatic plant, is present in the Buckhorn Pavilion area.</li> <li>• Blue-green algae (cyanobacteria), which can be toxic to people, pets, and fish.</li> <li>• Oil and gas activities (i.e., from oil fields west of the park) and saltwater disposal wells.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Partnerships with the City of Sulphur and the Chickasaw Nation to recirculate 500,000 gallons per day of treated water into the local water system. Treated discharge water from the City of Sulphur's wastewater treatment plant is now pumped to Dry Creek (outside the city of Davis) and then leaves the system entirely.</li> <li>• Partnerships with the City of Sulphur and the Chickasaw Nation to promote the use of surface water so the City of Sulphur could reduce its reliance on groundwater from the Arbuckle-Simpson aquifer.</li> <li>• Partnerships to steam clean boats prior to boat launches at Lake of the Arbuckles to prevent zebra mussel infestations.</li> </ul>
Data and/or GIS Needs	<ul style="list-style-type: none"> <li>• Continue collecting water quality and quantity data on springs, streams, lakes, and groundwater wells, including USGS stream gauges.</li> <li>• Research possibility of returning mineral water to Bromide Pavilion and/or Black Sulphur Spring Pavilion.</li> <li>• Monitor nutrient levels (nitrate and phosphorus) in streams and determine loading rates to Lake of the Arbuckles.</li> <li>• Data on water quality and quantity of treated wastewater from the City of Sulphur's wastewater treatment plant.</li> <li>• Monitoring for zebra mussels.</li> <li>• Research and monitor causes and effects of blue-green algae in park waters.</li> <li>• Hydrilla and bathymetric mapping of Lake of the Arbuckles.</li> <li>• Park-specific paleontology inventory.</li> </ul>

Fundamental Resource or Value	Water Resources and Geology
Planning Needs	<ul style="list-style-type: none"> <li>• Comprehensive water management plan (update).</li> <li>• Resource stewardship strategy.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Clean Air Act of 1977, as amended</li> <li>• Clean Water Act of 1972, as amended</li> <li>• Endangered Species Act of 1973, as amended</li> <li>• Federal Cave Resources Protection Act of 1998</li> <li>• Paleontological Resources Preservation Act of 2009</li> <li>• Executive Order 11988, "Floodplain Management"</li> <li>• Executive Order 11990, "Protection of Wetlands"</li> <li>• Executive Order 13112, "Invasive Species"</li> <li>• Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS <i>Management Policies 2006</i> (chapter 4) "Natural Resource Management"</li> <li>• Director's Order 77-1: <i>Wetland Protection</i></li> <li>• Director's Order 77-2: <i>Floodplain Management</i></li> <li>• NPS <i>Natural Resource Management Reference Manual 77</i></li> </ul>

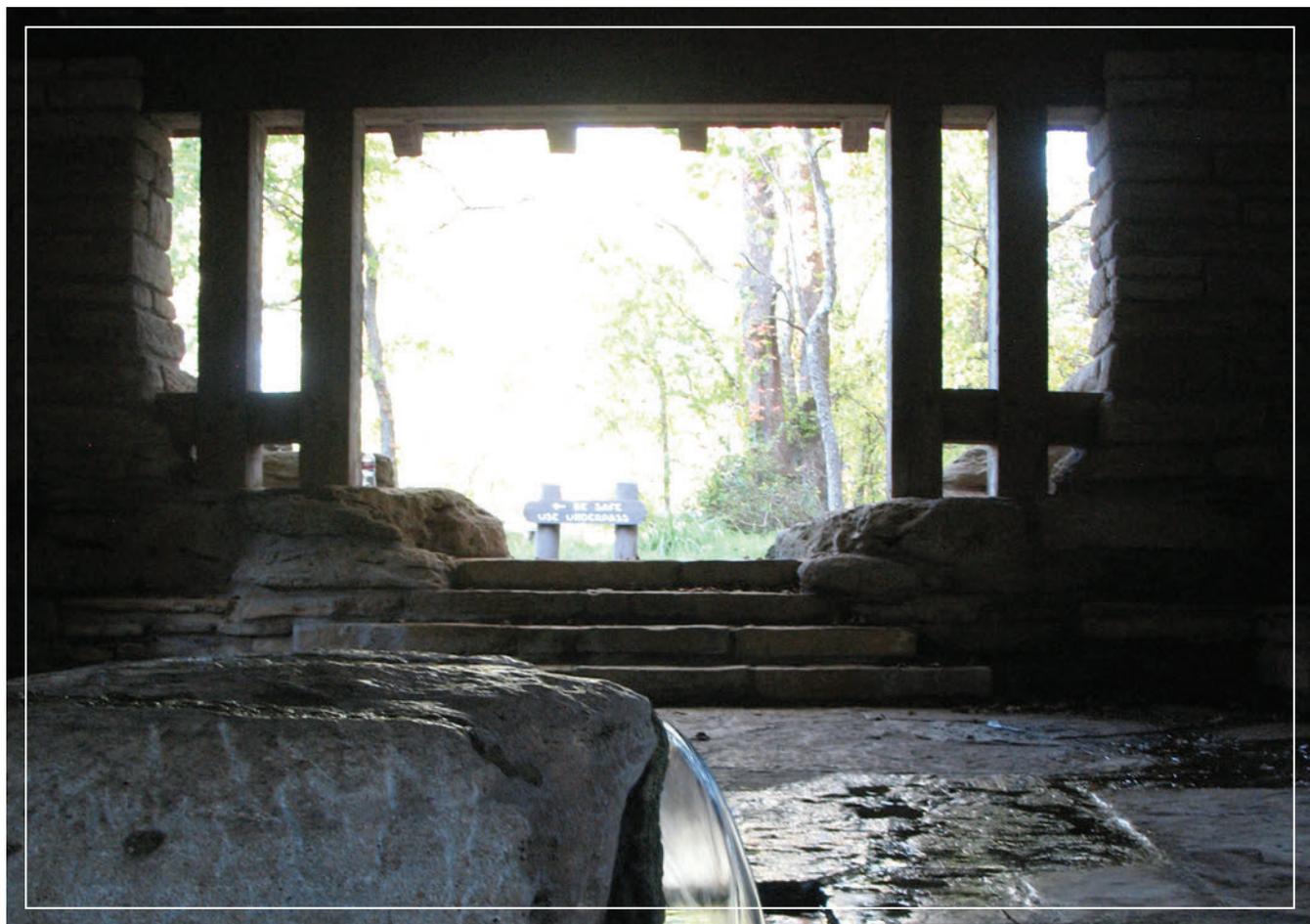


Fundamental Resource or Value	Historic Landscape and Structures
<b>Related Significance Statements</b>	Significance statements 3 and 5.
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• The historic landscape is in good condition.</li> <li>• Many historic structures are in fair to poor condition; some historic structures are in good condition.</li> <li>• The Platt National Park Historic District was designated a national historic landmark in 2011.</li> <li>• The Travertine Nature Center was listed in the National Register of Historic Places in 2010.</li> <li>• The lower part of Rock Creek Campground is eligible for listing in the National Register of Historic Places.</li> <li>• A cultural landscape report and cultural landscape inventory have been completed for the Platt National Park Historic District.</li> <li>• Multiple archeological sites have been identified parkwide.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Overall, the condition of historic structures is declining.</li> <li>• Visitation is increasing in the Platt Historic District.</li> <li>• Park visitors are increasing fitness use of Platt Historic District trails (e.g., Platt Trailblazers).</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Persistent and consistent vandalism of structures.</li> <li>• Concentrations of feral cats affecting structures and parts of the Platt Historic District landscape.</li> <li>• Recreational fire danger.</li> <li>• Tremendous litter problems.</li> <li>• Use of park structures by recreational narcotics users.</li> <li>• An increase in extreme storms, flooding, erosion, and wildfire due to climate change threaten the historic landscape and structures.</li> <li>• Management challenges created by native and nonnative invasive plant species throughout the cultural landscape (e.g., eastern red cedar [<i>Juniperus virginiana</i>] Johnson grass [<i>Sorghum halepense</i>], mimosa [<i>Albizia julibrissin</i>]).</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Partner with civic and church groups to remove trash throughout the park.</li> <li>• Renew partnership with the Oklahoma Department of Corrections for work crews to clean trash throughout the park.</li> <li>• Train historic masonry crews to restore and repair historic structures.</li> <li>• Work with other park units to obtain and share masonry crews to assist with the park's stonework projects.</li> <li>• Interpret the cultural landscape as part of ranger-led programs or informal contacts with visitors.</li> <li>• Return flowers to Flower Park (identify partner to coordinate or lead this effort).</li> <li>• Complete additional brick and mortar restoration projects.</li> </ul>

Fundamental Resource or Value	Historic Landscape and Structures
<p><b>Data and/or GIS Needs</b></p>	<ul style="list-style-type: none"> <li>• Cultural resource condition assessment.</li> <li>• Cultural landscape inventory for Rock Creek Campground.</li> <li>• Park boundary survey.</li> <li>• Input all historic structures into the Facility Management Software System (FMSS) database.</li> <li>• Update building data.</li> <li>• GIS data for powerlines, utilities, and waterlines.</li> <li>• Convert sewerline data from CAD to GIS.</li> <li>• Signage inventory (update).</li> </ul>
<p><b>Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Comprehensive interpretive plan (update).</li> <li>• Interpretive media plan (including apps, audiovisual, and digital media components).</li> <li>• Exhibit plan for Travertine Nature Center and Chickasaw Visitor Center.</li> <li>• Accessibility self-evaluation and transition plan.</li> <li>• Wayside plan.</li> <li>• Visitor use management plan.</li> <li>• Resource stewardship strategy.</li> </ul>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• American Indian Religious Freedom Act of 1978</li> <li>• Archeological and Historic Preservation Act of 1974</li> <li>• Archaeological Resources Protection Act of 1979</li> <li>• Historic Sites Act of 1935</li> <li>• Museum Properties Management Act of 1955, as amended</li> <li>• National Historic Preservation Act of 1966, as amended</li> <li>• Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>• Executive Order 13007, "Indian Sacred Sites"</li> <li>• Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>• "Department of the Interior Policy on Consultation with Indian Tribes"</li> <li>• "Protection of Historic Properties" (36 CFR 800)</li> </ul> <p><b>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>• Director's Order 24: <i>NPS Museum Collections Management</i></li> <li>• Director's Order 28: <i>Cultural Resource Management</i></li> <li>• Director's Order 28A: <i>Archeology</i></li> <li>• <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i></li> </ul>

Fundamental Resource or Value	Park History
<b>Related Significance Statements</b>	Significance statements 3, 4, 5, and 6.
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Ethnohistory study is complete.</li> <li>• Cultural landscape inventory and cultural landscape report for Platt Historic District are complete. Several publications related to the park's history have been completed, including <i>A History of Platt National Park</i> (Perry E. Brown 1954, rev. 1956), <i>A History of Platt National Park: A Century of Progress</i> (Dennis Muncrief 2007) and <i>Oklahoma Oasis: From Platt National Park to Chickasaw National Recreation Area</i> (Palmer H. Boeger 1987).</li> <li>• National Register of Historic Places nominations have been completed for the Platt Historic District and Travertine Nature Center.</li> <li>• The public has limited access to materials such as park records, and photos.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• None identified.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Loss of institutional knowledge from park staff.</li> <li>• Loss of the park museum collection due to fires, floods, and other damaging acts.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Include the Travertine Nature Center as a location for park history interpretation (e.g., displays, traveling trunks).</li> <li>• Partner with the University of Nebraska–Lincoln and NPS Midwest Archeological Center for assistance and expertise in conducting archeological surveys and other archeological projects.</li> <li>• Produce an interactive, 3-D, GIS map of the early town sites of Sulphur Springs.</li> <li>• Use Junior Ranger program to teach the history of the park to youth.</li> <li>• Develop a historical library and reading area for visitors to learn about the park's history.</li> <li>• Assist with the development of history curricula for local schools.</li> <li>• Partner with the University of Oklahoma Press and Western National Park Association to develop park research publications.</li> <li>• Partner with the Chickasaw Nation and Murray County Historical Society to develop park history outreach and education materials.</li> </ul>
<b>Data and/or GIS Needs</b>	<ul style="list-style-type: none"> <li>• Additional research about the CCC era at the park.</li> <li>• Feasibility study to investigate availability of space for historical exhibits, presentations, etc.</li> <li>• Park boundary survey.</li> <li>• Cultural resource condition assessment.</li> </ul>
<b>Planning Needs</b>	<ul style="list-style-type: none"> <li>• Comprehensive interpretive plan (update).</li> <li>• Resource stewardship strategy.</li> <li>• Collection management plan.</li> </ul>

Fundamental Resource or Value	Park History
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Archeological and Historic Preservation Act of 1974</li> <li>• Archaeological Resources Protection Act of 1979</li> <li>• Historic Sites Act of 1935</li> <li>• Museum Properties Management Act of 1955, as amended</li> <li>• National Historic Preservation Act of 1966, as amended</li> <li>• Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>• Executive Order 13007, "Indian Sacred Sites"</li> <li>• Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>• "Protection of Historic Properties" (36 CFR 800)</li> </ul> <p><b>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006 (chapter 5) "Cultural Resource Management"</li> <li>• Director's Order 24: NPS Museum Collections Management</li> <li>• Director's Order 28: Cultural Resource Management</li> <li>• Director's Order 28A: Archeology</li> <li>• The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> </ul>



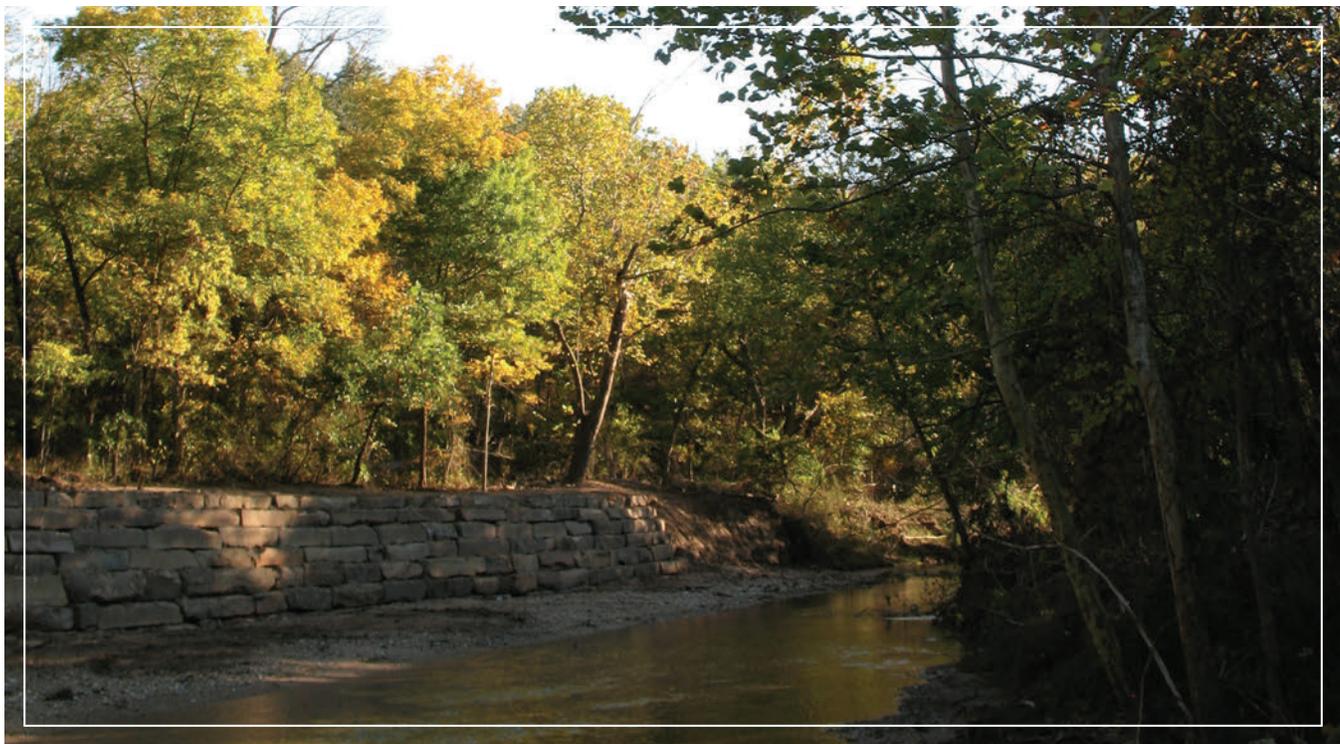


Fundamental Resource or Value	Recreational Opportunities
<b>Related Significance Statements</b>	Significance statements 1 and 4.
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• The park provides diverse recreational opportunities such as hiking, camping, fishing, swimming, hunting, birding, picnicking, boating, water skiing, observing nature and scenery, stargazing, and horseback riding.</li> <li>• The park has multiuse trails for bicycles, horseback riding, and hiking.</li> <li>• Water quality is generally good.</li> <li>• The park offers astronomy, wildflowers, birding, fishing, and other recreation-based programs.</li> <li>• The park maintains creekside viewsapes along highly visited roadway corridors and several popular scenic overlooks.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• General crime rates are increasing.</li> <li>• The number of Hispanic or Latino visitors is increasing and visitor demographics are changing.</li> <li>• Visitor use along Travertine Creek is increasing.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Fire.</li> <li>• Droughts and floods.</li> <li>• Destruction of sensitive riparian areas along Travertine Creek due to overuse.</li> <li>• Trash.</li> <li>• Ground-level ozone often reaches levels that can make breathing difficult for sensitive groups including children, the elderly, and people with existing health problems.</li> <li>• Ability to manage vegetation to preserve viewsapes at scenic overlooks.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Create a drawing for a bow hunt in the Platt Historic District.</li> <li>• Expand trail system to connect to Chickasaw Cultural Center (progress is being made as of 2016).</li> <li>• Construct bridge to connect Sulphur Chamber of Commerce area to the park via a walking bridge.</li> <li>• Partner to staff a park kiosk/booth.</li> <li>• Connect high school students with park via a safe crossing.</li> <li>• Identify partner for developing a fish cleaning station with tournament coordinators.</li> <li>• Provide mercury-related fish consumption advisory information to anglers.</li> </ul>

Fundamental Resource or Value	Recreational Opportunities
<p><b>Data and/or GIS Needs</b></p>	<ul style="list-style-type: none"> <li>• Visitor services report.</li> <li>• Signage inventory (update).</li> <li>• Deer harvest feasibility (buck/doe).</li> <li>• Fish inventory.</li> <li>• Park boundary survey.</li> <li>• GIS data for powerlines, utilities, and waterlines.</li> <li>• Assessment of marina.</li> <li>• Collect baseline data on dark night skies.</li> <li>• Visual resource inventory.</li> <li>• Studies to examine pollution dose-response relationships in sensitive park ecosystems, including monitoring mercury and other toxic contaminants in park biota.</li> <li>• Feasibility study for construction of bike and walking trail from bridge connecting Chickasaw National Recreation Area and Chickasaw Cultural Center.</li> <li>• Recreation use carrying capacity study.</li> </ul>
<p><b>Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Visitor use management plan.</li> <li>• Comprehensive trail management plan.</li> <li>• Exhibit plan for Travertine Nature Center and Chickasaw Visitor Center.</li> <li>• Parkwide lighting plan.</li> <li>• Accessibility self-evaluation and transition plan.</li> <li>• Environmental management system plan.</li> <li>• Fishery management plan.</li> </ul>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Clean Air Act of 1977, as amended</li> <li>• Clean Water Act of 1972, as amended</li> <li>• NPS Concessions Management Improvement Act of 1998</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>• "Resource Protection, Public Use and Recreation: Fishing" (36 CFR 2.3)</li> <li>• "Protection of Historic Properties" (36 CFR 800)</li> </ul> <p><b>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006 (chapter 8) "Use of the Parks"</li> <li>• Director's Order 4: <i>Diving Management</i></li> <li>• Director's Order 6: <i>Interpretation and Education</i></li> <li>• Director's Order 9: <i>Law Enforcement Program</i></li> <li>• Director's Order 17: <i>National Park Service Tourism</i></li> <li>• Director's Order 28: <i>Cultural Resource Management</i></li> <li>• Director's Order 42: <i>Accessibility for Visitors with Disabilities in National Park Service Programs and Services</i></li> <li>• Director's Order 53: <i>Special Park Uses</i></li> <li>• Director's Order 83: <i>Public Health</i></li> <li>• NPS Natural Resource Management Reference Manual 77</li> <li>• NPS Transportation Planning Guidebook</li> </ul>

Fundamental Resource or Value	Western Prairie / Eastern Woodlands Transition Zone
<b>Related Significance Statements</b>	Significance statement 2.
<b>Current Conditions and Trends</b>	<p><b>Conditions</b></p> <ul style="list-style-type: none"> <li>• Red cedar trees are expanding into some areas of the park; other areas have been restored by tree cutting and prescribed burns.</li> <li>• Buffalo pasture is overgrazed and red cedar and hardwood trees are invading portions of the pasture.</li> <li>• A vegetation inventory for the park was completed in 2008. The park has a fire management plan.</li> <li>• The park contains several nonnative species that are well established (e.g., Johnson grass, Japanese brome, and nodding musk thistle).</li> <li>• The NPS Southern Plains Inventory and Monitoring Network annually monitors grasslands, nonnative plants, and breeding landbirds in the park.</li> </ul> <p><b>Trends</b></p> <ul style="list-style-type: none"> <li>• Controlled burns have reestablished native grasses and hardwoods in some areas of the park.</li> <li>• Suppression of natural fire regime has resulted in an increase in woodlands cover and a decrease in prairie cover.</li> </ul>
<b>Threats and Opportunities</b>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Biodiversity is negatively affected by the expansion of eastern red cedar trees into tallgrass prairie habitat.</li> <li>• Nonnative invasive grasses such as Johnson grass and king ranch bluestem outcompete native grasses and are disruptive to natural ecosystems.</li> <li>• Invasive species such as feral hogs and cats threaten biodiversity. Feral cats are predators of many small types of wildlife, compete with native species (e.g., skunks, opossums, raccoons, and foxes) for food, and may transmit disease.</li> <li>• Frequency of droughts, floods, and ice storms due to climate change could impact grassland productivity.</li> <li>• Natural communities are at risk for harmful effects of air pollution, including nutrient enrichment from excess deposition of nitrogen, mercury contamination, and impacts to ozone-sensitive plants.</li> <li>• Noise and artificial light can disrupt natural ecosystems.</li> <li>• Climate change is likely to increase presence of invasive species.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Feature ecotone educational concepts in interpretive programs.</li> <li>• Highlight pollinator emphasis to natural systems.</li> <li>• Seek funding to continue red cedar management and restore prairie landscapes.</li> <li>• Reduce coverage of red cedar trees to enhance native hardwoods and prairies.</li> <li>• Present more environmental education programs to groups such as Goddard Youth Camp.</li> </ul>
<b>Data and/or GIS Needs</b>	<ul style="list-style-type: none"> <li>• Inventory of woodland habitat and species, including owls and breeding birds.</li> <li>• Inventory of quail and turkey.</li> <li>• Feasibility study for relocation of bison pasture and/or expansion of grazing area.</li> <li>• Continue deer counts and surveys.</li> <li>• Vegetation map (update).</li> <li>• Fence inventory.</li> </ul>

Fundamental Resource or Value	Western Prairie / Eastern Woodlands Transition Zone
<p><b>Planning Needs</b></p>	<ul style="list-style-type: none"> <li>• Invasive species management plan (focus on red cedar removal).</li> <li>• Fire management plan (update).</li> <li>• Bison management plan.</li> <li>• Resource stewardship strategy.</li> </ul>
<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</b></p>	<p><b>Laws, Executive Orders, and Regulations That Apply to the FRV</b></p> <ul style="list-style-type: none"> <li>• Clean Air Act of 1977, as amended</li> <li>• Endangered Species Act of 1973, as amended</li> <li>• National Environmental Policy Act of 1969, as amended</li> <li>• Executive Order 11514, "Protection and Enhancement of Environmental Quality"</li> <li>• Executive Order 11990, "Protection of Wetlands"</li> <li>• Executive Order 13112, "Invasive Species"</li> <li>• Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act"</li> <li>• Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Natural and Cultural Resources"</li> </ul> <p><b>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</b></p> <ul style="list-style-type: none"> <li>• NPS Management Policies 2006 (§2.1.2) "Scientific, Technical, and Scholarly Analysis"</li> <li>• NPS Management Policies 2006 (§4.1) "General Management Concepts"</li> <li>• NPS Management Policies 2006 (§4.4.1) "General Principles for Managing Biological Resources"</li> <li>• NPS Management Policies 2006 (§4.4.2) "Management of Native Plants and Animals"</li> <li>• NPS Management Policies 2006 (§4.9) "Soundscape Management"</li> <li>• NPS Management Policies 2006 (§4.10) "Lightscape Management"</li> <li>• Director's Order 77: <i>Natural Resource Protection</i></li> </ul>



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

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

The following are key issues for Chickasaw National Recreation Area and the associated planning and data needs to address them:

- **Visitor Experience and Resource Protection.** Visitation has increased in recent years and the park struggles to provide adequate facilities and services expected by visitors today. In addition, destruction of sensitive riparian areas – particularly along Travertine Creek – has become more prevalent due to crowding and overuse. Existing facilities such as parking areas, boat launches, campgrounds, and restrooms do not accommodate visitor capacity during peak periods. Human-caused impacts associated with littering and vandalism of park facilities and historic resources as well as elevated contaminant levels in park waters can also threaten visitor experiences.
  - *Associated planning and data needs:* Visitor use management plan; comprehensive trail management plan; exhibit plan for Travertine Nature Center and Chickasaw Visitor Center; feasibility study for construction of bike and walking trail from bridge connecting Chickasaw National Recreation Area and Chickasaw Cultural Center; recreation use carrying capacity study; accessibility self-evaluation and transition plan; environmental management system plan; visitor services report; signage inventory (update); park boundary survey; GIS data for powerlines, utilities, and waterlines; assessment of marina
- **Reduction of Spring and Stream Flows.** The greatest threat to the springs and creeks in Chickasaw National Recreation Area is groundwater withdrawal from the Arbuckle-Simpson aquifer. In order to maintain flow in springs and streams, long-term withdrawals of groundwater must be less than the long-term recharge rate. The use and management of the Arbuckle-Simpson aquifer, which is the source of water for the park's springs and provides base flow to streams, is a major concern to the National Park Service and other agencies, groups, businesses, and individuals in the region. Increased groundwater withdrawals from the aquifer will result in reduced spring and stream flows, which may reduce visitation to the park. Lowered stream flow may also affect surface water quality and contribute to an increase in aquatic invasive species in certain areas of the park. The park will continue planning efforts with the City of Sulphur and the Chickasaw Nation to develop surface water resources in place of groundwater withdrawals.
  - *Associated planning and data needs:* Comprehensive water management plan (update), resource stewardship strategy, research causes and impacts of blue-green algae and develop monitoring protocol, bathymetric mapping to recalculate dissolved oxygen and to determine distribution of hydrilla, monitor for zebra mussels, monitor nutrient levels (nitrate and phosphorus) in streams and determine loading rates to Lake of the Arbuckles, continue data collection and monitoring at Travertine Creek and Antelope Springs, research feasibility for returning mineral water to Bromide Pavilion and Black Sulphur Pavilion, collect water quality and quantity data on the output of treated wastewater from the City of Sulphur's wastewater treatment plant

- **Bison Management.** A bison management plan is needed to ensure the well-being of the bison and condition of their pasture and to provide long-term goals and direction concerning herd management. In 2016, 65 acres (77%) of the 84-acre buffalo pasture was covered with eastern red cedar, post oak, and other hardwood trees and woody vegetation. The invasion of red cedar and hardwood trees into the formerly open grasslands is a result of both the CCC reforestation efforts in the 1930s and fire suppression. Red cedar and hardwood encroachment is shading out forage plants and severely impairing the grazing capacity for the bison herd by degrading both the quality and area of pasturage.

About 20 acres (23%) of the buffalo pasture consists of poor-quality forage due to overgrazing, ongoing drought, and encroachment of undesirable vegetation. Yearlings are usually culled, but due to the lack of a corral, the herd has not been culled since 2011.

- *Associated planning and data needs:* Bison management plan; feasibility study for relocation of bison pasture and/or expansion of grazing area (including forage, habitat, and carrying capacity)
- **Eastern Red Cedar Tree and Invasive Plant Management.** Several of the park’s ecosystems have been altered by the expansion of eastern red cedar trees and the expansion of invasive terrestrial species such as Johnson grass. Fire suppression activities have aided the expansion of red cedar trees, which are encroaching on native prairie, converting it to a forested system. A decrease in native prairie as a result of red cedar encroachment can decrease available forage and browse for bison and other wildlife. Expansion of red cedar trees can pose an ongoing threat within the recreation area and surrounding lands because of the potential to alter fuels for wildfires. Johnson grass’s aggressive growth and growth height can outcompete many native plant species and also be toxic to grazers at certain times of the year.
  - *Associated planning and data needs:* Invasive species management plan, fire management plan (update), resource stewardship strategy
- **Museum Management.** The park needs collections management and curatorial assistance, including addressing a cataloguing backlog. The park does not currently have the training and resources required to address these areas.
  - *Associated planning and data needs:* Collection management plan

## Planning and Data Needs

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

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

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
FRV, Key Issue	Visitor use management plan	H	Increasing visitation in recent years continues to accelerate impacts to park resources at popular day use areas along creek corridors and lake access points and has strained the capacity of park facilities. Impacts include trampled vegetation along creek banks; various challenges associated with parking, and elevated contaminant levels in park waters. A visitor use management plan would address capacity issues during peak periods and resource impacts due to visitor actions. The plan would also include goals, indicators, and standards for preserving the park's dark night skies.
FRV, Key Issue	Comprehensive water management plan (update)	H	Since the 1998 water management plan was completed, much has been learned about the Arbuckle-Simpson aquifer and the park's hydrology. Almost 20 years of new monitoring data have been collected and many changes in water use and water law have occurred.
FRV, Key Issue	Bison management plan	H	A bison management plan is needed to ensure the well-being of the bison herd and condition of their pasture and to provide long-term goals and direction concerning bison management.
FRV, Key Issue	Invasive species management plan	H	Issues regarding eastern red cedar, nonnative plants, aquatic invasive species, and feral hogs and cats could be addressed jointly or in separate plans (i.e., invasive plants, aquatic invasive species, and nonnative animals).
FRV, Key Issue	Comprehensive trail management plan	H	Trail planning should focus on the park's partnership with the Chickasaw Nation regarding infrastructure development. It should be based on the 2015 environmental assessment for the bridge connecting Chickasaw National Recreation Area and the Chickasaw Cultural Center.
FRV, Key Issue	Fire management plan (update)	M/H	The fire management plan / environmental assessment prepared in 1997 has been reviewed annually but needs to be updated or rewritten.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
FRV, Key Issue	Resource stewardship strategy	M	This resource management tool would assist the park in identifying current natural and cultural resource conditions and create comprehensive management activities to achieve target conditions in the context of climate change and other resource stressors. It would be informed by natural and cultural resource condition assessments.
FRV, Key Issue	Accessibility self-evaluation and transition plan	M	The plan would assess visitor accessibility conditions with recommendations for improvements as needed. Media is an important component of the plan.
FRV, Key Issue	Environmental management system plan	M	The park needs to develop this mandated plan.
FRV	Wayside plan	M	This plan should address historical exhibits and could be expanded to include parkwide exhibits. It should relate to the needed interpretive media plan and comprehensive interpretive plan.
FRV	Interpretive media plan	M	This plan should include guidance on social media, apps, audiovisual elements, etc. It should also address opportunities for partnerships with the Chickasaw Nation and the need for an assisted listening component at Travertine Nature Center.
FRV	Comprehensive interpretive plan (update)	M	Outside assistance is needed to complete this plan.
FRV, Key Issue	Exhibit plan for Travertine Nature Center and Chickasaw Visitor Center	M	This plan should address updating exhibits and other materials at the nature center. The Chickasaw Nation has volunteered to assist in this effort.
FRV	Collection management plan	M	This plan represents one of the primary museum planning documents and would assist the park's museum management efforts that are identified as a key issue.
FRV	Parkwide lighting plan	M	This plan would address comprehensive park lighting practices and assist preservation of the park's dark night skies.
FRV	Fishery management plan	L	This plan would be developed in partnership with the Oklahoma Department of Wildlife Conservation.

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to FRV or Key Issue?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Notes, Including Which Planning Need This Data Need Relates To</b>
FRV, Key Issue	Blue-green algae impacts research and monitoring protocol	H	Comprehensive water management plan (update).
FRV, Key Issue	Monitoring for zebra mussels	H	Comprehensive water management plan (update) and invasive species management plan.
FRV, Key Issue	Continued monitoring of springs, streams, and wells, including USGS gauges at Travertine Creek, Antelope Springs, and observation wells	H	Comprehensive water management plan (update).
FRV, Key Issue	Feasibility study for relocation of bison pasture and/or expansion of grazing area	H	Bison management plan.
FRV, Key Issue	Recreation use carrying capacity study	H	Accessibility self-evaluation and transition plan, wayside plan, interpretive media plan, comprehensive interpretive plan (update), exhibit plan for Travertine Nature Center and Chickasaw Visitor Center, and resource stewardship strategy.
FRV	Input all historic structures into FMSS	H	Resource stewardship strategy.
FRV	Park specific paleontology inventory	H	Resource stewardship strategy. Note: a paleontology inventory is in progress and will be completed in fiscal year (FY) 2016.
FRV, Key Issue	GIS data for powerlines, utilities, and waterlines	H	Resource stewardship strategy.
FRV	Convert sewerline data from CAD to GIS	H	Resource stewardship strategy.
FRV, Key Issue	Bathymetric mapping to recalculate dissolved oxygen and to determine distribution of hydrilla	M	Comprehensive water management plan (update) and invasive species management plan.
FRV, Key Issue	Monitor nutrient levels (nitrate and phosphorus) in streams and determine loading rates to Lake of the Arbuckles	M	Comprehensive water management plan (update).

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to FRV or Key Issue?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Notes, Including Which Planning Need This Data Need Relates To</b>
FRV, Key Issue	Research feasibility for returning mineral water to Bromide Pavilion and Black Sulphur Spring Pavilion	M	Comprehensive water management plan (update).
FRV	Deer counts/surveys (ongoing)	M	Resource stewardship strategy.
FRV	Cultural landscape inventory for Rock Creek Campground	M	Resource stewardship strategy.
FRV	Vegetation map (update)	M	Including GIS data; relates to invasive species management plan and resource stewardship strategy.
FRV	Fence inventory	M	Including GIS data; relates to resource stewardship strategy.
FRV	Building data (update)	M	FMSS; GIS data; relates to resource stewardship strategy.
FRV, Key Issue	Park boundary survey	M	Including GIS data; relates to resource stewardship strategy.
FRV, Key Issue	Assessment of marina	M	
FRV, Key Issue	Data on water quality and quantity of treated wastewater from the City of Sulphur’s wastewater treatment plant	M	Comprehensive water management plan (update).
FRV	Additional research about the CCC era at the park	M	
FRV	Feasibility study to investigate availability of space for designated areas for historical exhibits, presentations, etc.	M	
FRV	Deer harvest feasibility (buck/doe)	M	

<b>Data Needs – Where Information Is Needed Before Decisions Can Be Made</b>			
<b>Related to FRV or Key Issue?</b>	<b>Data and GIS Needs</b>	<b>Priority (H, M, L)</b>	<b>Notes, Including Which Planning Need This Data Need Relates To</b>
FRV, Key Issue	Feasibility study for construction of bicycling and walking trail from bridge connecting Chickasaw National Recreation Area and the Chickasaw Cultural Center	M	
FRV	Inventory of woodland habitat and species, including owls and breeding birds	M	Resource stewardship strategy.
FRV	Inventory of quail and turkey	M	
FRV	Collect baseline data on dark night skies	M	
FRV, Key Issue	Visitor services report	L	Accessibility self-evaluation and transition plan, wayside plan, interpretive media plan, comprehensive interpretive plan (update), exhibit plan for Travertine Nature Center and Chickasaw Visitor Center, and resource stewardship strategy.
FRV	Cultural resource condition assessment	L	Resource stewardship strategy.
FRV	Fish inventory	L	Resource stewardship strategy.
FRV, Key Issue	Signage inventory (update)	L	FMSS; GIS data; relates to accessibility self-evaluation and transition plan, wayside plan, interpretive media plan.
FRV	Visual resource inventory	L	Resource stewardship strategy
FRV	Studies to examine pollution dose-response relationships in sensitive park ecosystems	L	Resource stewardship strategy

## Part 3: Contributors

### Chickasaw National Recreation Area

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Debbie Sharp, President, Friends of Chickasaw National Recreation Area

# Appendixes

## Appendix A: Enabling Legislation for Chickasaw National Recreation Area

PUBLIC LAW 94-235—MAR. 17, 1976

90 STAT. 235

### Public Law 94-235 94th Congress

#### An Act

To establish the Chickasaw National Recreation Area in the State of Oklahoma, and for other purposes.

Mar. 17, 1976  
[H.R. 4979]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to provide for public outdoor recreation use and enjoyment of Arbuckle Reservoir and land adjacent thereto, and to provide for more efficient administration of other adjacent area containing scenic, scientific, natural, and historic values contributing to public enjoyment of the area and to designate the area in such manner as will constitute a fitting memorialization of the Chickasaw Indian Nation, there is hereby established the Chickasaw National Recreation Area (hereinafter referred to as the "recreation area") consisting of lands and interests in lands within the area as generally depicted on the drawing entitled "Boundary Map, Chickasaw National Recreation Area," numbered 107-20004-A and dated February 1974, which shall be on file and available for inspection in the offices of the National Park Service, Department of the Interior. The Secretary of the Interior (hereinafter referred to as the "Secretary") may from time to time revise the boundaries of the recreation area by publication of a map or other boundary description in the Federal Register, but the total acreage of the recreation area may not exceed ten thousand acres.

Chickasaw  
National  
Recreation Area,  
Okla.  
Establishment.  
16 USC 460hh.

Publication in  
Federal Register.

SEC. 2. (a) The Secretary may acquire land or interests in lands within the boundaries of the recreation area by donation, purchase with donated or appropriated funds, or exchange. When any tract of land is only partly within such boundaries, the Secretary may acquire all or any portion of the land outside of such boundaries in order to minimize the payment of severance costs. Land so acquired outside of the boundaries may be exchanged by the Secretary for non-Federal lands within the boundaries, and any land so acquired and not utilized for exchange shall be reported to the General Services Administration for disposal under the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), as amended. Any Federal property located within the boundaries of the recreation area may be transferred without consideration to the administrative jurisdiction of the Secretary for the purposes of the recreation area. Lands within the boundaries of the recreation area owned by the State of Oklahoma, or any political subdivision thereof, may be acquired only by donation: *Provided*, That the Secretary may also acquire lands by exchange with the city of Sulphur, utilizing therefor only such lands as may be excluded from the recreation area which were formerly within the Platt National Park.

Land acquisition.  
16 USC 460hh-1.

40 USC 471 note.

(b) With respect to improved residential property acquired for the purposes of this Act, which is beneficially owned by a natural person and which the Secretary determines can be continued in that use for a limited period of time without undue interference with the administration, development, or public use of the recreation area, the owner thereof may on the date of its acquisition by the Secretary retain a right of use and occupancy of the property for noncommercial residential purposes for a term, as the owner may elect, ending either (1) at the death of the owner or his spouse, whichever

Residential  
property.

occurs later, or (2) not more than twenty-five years from the date of acquisition. Any right so retained may, during its existence, be transferred or assigned. The Secretary shall pay to the owner the fair market value of the property on the date of such acquisition, less the fair market value on such date of the right retained by the owner.

“Improved residential property.”

(c) As used in this Act, “improved residential property” means a single-family year-round dwelling, the construction of which began before March 1, 1975, and which serves as the owner’s permanent place of abode at the time of its acquisition by the United States, together with not more than three acres of land on which the dwelling and appurtenant buildings are located that the Secretary finds is reasonably necessary for the owner’s continued use and occupancy of the dwelling: *Provided*, That the Secretary may exclude from improved residential property any waters and adjoining land that the Secretary deems is necessary for public access to such waters.

(d) The Secretary may terminate a right to use and occupancy retained pursuant to this section upon his determination that such use and occupancy is being exercised in a manner not consistent with the purposes of the Act, and upon tender to the holder of the right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination.

Hunting and fishing.  
16 USC 460hh-2.

SEC. 3. The Secretary shall permit hunting and fishing on lands and waters within the recreation area in accordance with applicable Federal and State laws: *Provided*, That he may designate zones where, and establish periods when, no hunting or fishing will be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any regulations issued by the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate State agency responsible for hunting and fishing activities.

Administration.  
16 USC 460hh-3.

SEC. 4. (a) Except as otherwise provided in this Act, the Secretary shall administer the recreation area in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1, 2-4), as amended and supplemented.

(b) Nothing contained in this Act shall affect or interfere with the authority of the Secretary by the Act of August 24, 1962 (76 Stat. 395), to operate the Arbuckle Dam and Reservoir in accordance with and for the purposes set forth in that Act.

Repeal.  
16 USC 460hh-4.

SEC. 5. The Act of June 29, 1906 (34 Stat. 837), which directed that certain lands now included by this Act in the recreation area be designated as the Platt National Park, is hereby repealed, and such lands shall hereafter be considered and known as an integral part of the Chickasaw National Recreation Area: *Provided*, That within such area the Secretary may cause to be erected suitable markers or plaques to honor the memory of Orville Hitchcock Platt and to commemorate the original establishment of Platt National Park.

Publication in Federal Register.  
16 USC 460hh-5.

SEC. 6. Notwithstanding the provisions of section 7 of the Act of June 16, 1906 (34 Stat. 272), which retain exclusive jurisdiction in the United States, upon notification in writing to the Secretary by the appropriate State officials of the acceptance by the State of Oklahoma of concurrent legislative jurisdiction over the lands formerly within the Platt National Park, the Secretary shall publish a notice to that effect in the Federal Register and, upon such publication, concurrent legislative jurisdiction over such lands is hereby ceded to the State of Oklahoma: *Provided*, That such cession of jurisdiction shall not occur until a written agreement has been reached between the State of Oklahoma and the Secretary providing for the exercise of concurrent jurisdiction over all other lands and waters within the Chickasaw National Recreation Area.

SEC. 7. There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, but not to exceed \$1,600,000 for the acquisition of lands and interests in lands, and \$4,567,000 for development.

Approved March 17, 1976.

## Appendix B: Inventory of Administrative Commitments

Title / Agency / Organization	Purpose / Description	Dates	Responsible Party/Parties
<b>Memorandum of Understanding</b>			
Oklahoma Department of Transportation (DOT)	Oklahoma DOT maintains U.S. Highway 177, including roadway, signs, and guardrails.	Established in 2001; ongoing	Chickasaw National Recreation Area and Oklahoma DOT.
<b>Memorandums of Agreement</b>			
City of Sulphur	A series of rights-of-way, easements, and memorandums of agreement provide for the City of Sulphur to access and operate its wastewater treatment plant on city-owned land within Chickasaw National Recreation Area, as well as maintain underground pipes that pass through the recreation area.	Ongoing	Chickasaw National Recreation Area and City of Sulphur.
Goddard Youth Camp	The camp has permission to operate its facility within the Chickasaw National Recreation Area. The camp was established in 1965 by the Goddard Foundation as a nonprofit youth camp and environmental education facility.	Established in May 2006; ongoing	Chickasaw National Recreation Area and Goddard Youth Camp.
Utility providers	A series of rights-of-way, easements, and memorandums of agreement provide for a variety of utility lines to cross through Chickasaw National Recreation Area, including phone and gas lines through the Platt Historic District and phone, gas, and powerlines through the Guy Sandy, the Point, and Buckhorn areas.	Ongoing	Chickasaw National Recreation Area and utility providers.
<b>Interagency Agreement</b>			
Arbuckle Master Conservancy; U.S. Army Corps of Engineers; Bureau of Reclamation	The Arbuckle Master Conservancy and U.S. Army Corps of Engineers manage the water level of Lake of the Arbuckles, and the Bureau of Reclamation maintains the reservoir dam.	Ongoing	Chickasaw National Recreation Area, Arbuckle Master Conservancy, U.S. Army Corps of Engineers, Bureau of Reclamation.
<b>Interpark Agreement</b>			
Chickasaw National Recreation Area services agreement with Washita Battlefield National Historic Site	Chickasaw National Recreation Area shares zone safety personnel with Washita Battlefield National Historic Site and has received assistance with law enforcement and maintenance.	Ongoing	Mainly for administrative support; no formal agreement in place.

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

Planning / Data Document	Year
<i>Master Plan Narrative - Volumes I and III for Platt National Park</i>	7/30/1962
<i>Interpretive Prospectus, Platt National Park</i>	3/6/1965
Duffer, William R., and Curtis C. Harlin Jr. <i>Changes in Water Quality Resulting from Impoundment</i>	8/1/1971
Hart, Donald L. Jr. <i>Hydrology of the Platt National Park Area, Murray County</i>	1/1/1972
Barker, Ballard M. and William Carl Jameson. <i>Platt National Park: Environment and Ecology</i>	1/1/1975
Havens, John S. and DeRoy L. Bergman. <i>Ground-Water Records for Southeastern Oklahoma Part 1 - Records of Wells, Test-Holes, and Springs</i>	6/1/1976
Streebin, Leale E. and James F. Harp. <i>Water Quality Management Study</i>	10/1/1977
General Management Plan	11/18/1980
Land Protection Plan	12/1/1984
Taylor, Michael S. <i>A Preliminary Survey of the Fishes</i>	1/1/1985
<i>Final General Management Plan Addendum with Development Concept Plan and Environmental Assessment: Veterans Lake</i>	4/1/1985
Stubbendieck, James and Gary Willson. <i>An Identification of Prairie in National Park Units in the Great Plains</i>	1/1/1986
<i>Comprehensive Trail Design and Environmental Assessment</i>	5/1/1986
The Benham Group, Inc. <i>An Archaeological Survey of a Proposed Water Pipeline and Road Realignment</i>	3/10/1989
Resources Management Plan	3/1/1989
<i>Feasibility Study: Lake of the Arbuckles</i>	7/1/1992
Anderson, Joseph K. <i>An Archaeological Survey of Approximately 576 Meters of Fence Line Right-of-Way</i>	12/1/1992
Hanson, Ronald L. and Steven W. Cates. <i>Hydrogeology of the Chickasaw National Recreation Area, Murray County, Oklahoma</i>	1/1/1994
Bussey, Stanley D. and Roger J. Burkhalter. <i>Archaeological Survey for the Proposed Visitor Center, Proposed Administrative/Maintenance Facilities, and Buckhorn and Guy Sandy Campgrounds Improvement</i>	5/16/1994
<i>Environmental Assessment and Finding of No Significant Impact, Buckhorn Campground Rehabilitation</i>	7/13/1994

Planning / Data Document	Year
<i>Final Amendment to General Management Plan/Development Concept Plan</i>	10/31/1994
<i>Environmental Assessment and Finding of No Significant Impact, The Point Campground Improvement</i>	8/14/1997
<i>GPRA Strategic Plan and FY 98 Annual Performance Plan</i>	10/1/1997
NPS Water Resources Division. <i>Baseline Water Quality Data Inventory and Analysis</i>	12/1/1997
Wikle, Thomas, Michael Nicholl, Tonia Brown, Jason Nord, Ron Parker and Don Weeks. <i>Water Resources Management Plan</i>	7/31/1998
Ostrander, Gary K., Ron Parker, and William E. Hawkins. "Persistent Expression of Tumors in Lake of the Arbuckles Gizzard Shad: A Summary of Eight Years of Study." <i>Park Science</i> , no. 1 (1999): 34-36	2/1/1999
Resources Management Plan	5/14/1999
Nicholl, M., T. Wikle, T. Brown, J. Nord and R. Parker. "Water Quantity Issues at Chickasaw National Recreation Area: As Historic Springs Diminish in Flow, Provisions of a Water Resources Management Plan Aim at Understanding the Causes and Mitigating the Decline." <i>Park Science</i> , no. 2 (1999): 30-32	12/1/1999
<i>Determination of Significance for National Historic Landmark Status, Platt National Park Travertine Historic District</i>	10/26/2000
Strategic Plan	11/15/2000
Hoagland, Bruce W. and Forrest L. Johnson. <i>Vegetation Management Plan for Arbuckle District</i>	12/20/2000
Hoagland, Bruce W. and Forrest L. Johnson. "Vascular Flora of the Chickasaw National Recreation Area, Murray County, Oklahoma." <i>Southern Appalachian Botanical Society</i> , no. 4 (2001): 383-400	12/1/2001
<i>Personal Watercraft Use Environmental Assessment</i>	2/1/2003
McChristian, Douglas C. <i>The Great Health Giving Mecca and Summer Resort: Platt National Park, The Early Years</i>	6/1/2003
Koch, A. L. and V. L. Santucci. <i>Paleontological Resource Inventory and Monitoring, Southern Plains Network</i>	12/1/2003
Hohmann, Heidi and Katarzyna Grala. <i>Cultural Landscape Report: Platt Historic District</i>	3/25/2004
Wray, Jacilee and Alexa Roberts. <i>An Ethnohistory of the Relationship between the Community of Sulphur, Oklahoma and Chickasaw National Recreation Area</i>	7/29/2004
Kelly, Jeff, Joel Strong, Jesse Bahm and Adrienne Lee Cooper. <i>Mammal, Bird and Herpetological Inventory</i>	12/14/2004
Business Plan - Fiscal Year 2003	5/1/2005

Planning / Data Document	Year
<i>Comprehensive Interpretive Plan Section One: Long-Range Interpretive Plan</i>	7/26/2005
Perkins, D. W., H. Sosinski, K. Cherwin, and T. F. Zettner. <i>Southern Plains Network Vital Signs Monitoring Plan: Phase I</i>	10/1/2005
Bennett, James P. and Clifford M. Wetmore. "Lichens of the U.S. National Parks." <i>American Bryological and Lichenological Society</i> , no. 4 (2005): 544-553	12/1/2005
Becker, C.J. <i>Water Quality and Possible Sources of Nitrogen and Bacteria to Rock and Travertine Creeks</i>	1/1/2006
Scheirer, Daniel S. and Allegra Hosford Scheirer. <i>Gravity Investigations</i>	1/1/2006
Federal Highway Administration. <i>The Road Inventory</i>	2/3/2006
Manni, Marc F. and Steven J. Hollenhorst. <i>Visitor Study, Summer 2005</i>	3/1/2006
<i>National Register of Historic Places Consensus Determination of Eligibility for Rock Creek Campground</i>	3/13/2006
<i>National Register of Historic Places Consensus Determination of Eligibility for Platt Historic District</i>	6/12/2006
<i>Cultural Landscapes Inventory: Pavilion Springs, Hillside Spring, HQ/ Maintenance Area</i>	1/1/2007
<i>Cultural Landscapes Inventory: Buffalo Pasture/Prairie Uplands</i>	1/1/2007
<i>Cultural Landscapes Inventory: Central Campground</i>	1/1/2007
<i>Cultural Landscapes Inventory: Bromide Springs/Bromide Hill</i>	1/1/2007
<i>Cultural Landscapes Inventory: Cold Springs Campground</i>	1/1/2007
<i>Cultural Landscapes Inventory: Rock Creek Campground</i>	1/1/2007
<i>Cultural Landscapes Inventory: Little Niagara Falls/Travertine Island</i>	1/1/2007
<i>Cultural Landscapes Inventory: Flower Park and Black Sulphur Springs</i>	1/1/2007
<i>Cultural Landscapes Inventory: Walnut Grove</i>	1/1/2007
<i>First Annual Centennial Strategy</i>	8/1/2007
<i>Cultural Landscapes Inventory: Perimeter Road</i>	1/1/2008
Graham, John. <i>Geologic Resource Evaluation Scoping Summary</i>	1/31/2008
General Management Plan	2/1/2008
Richardson, David J. <i>Intermountain Region New Deal Resources: Research Findings</i>	4/30/2008

Planning / Data Document	Year
Stynes, Daniel. <i>Impacts of Visitor Spending on the Local Economy</i>	6/1/2008
Osborn, Alan J. and Ralph J. Hartley. <i>Archeological Survey</i>	8/1/2008
<i>Environmental Assessment and Finding of No Significant Impact for the Sulphur Municipal Authority, CWSRF Wastewater Project No. ORF-09-0030-CW</i>	11/13/2009
Salas, D. E., T. Folts-Zettner, R. W. Sanders, J. Drake. <i>Vegetation classification and mapping</i>	2/1/2010
Folts-Zettner, T., R. E. Bennetts, and H. Sosinski. <i>Exotic plant monitoring in the Southern Plains Network: project report 2009</i>	8/1/2010
<i>Comprehensive Interpretive Plan, Fiscal Years 2011–2015</i>	1/31/2011
Sullivan, T. J., T. C. McDonnell, G. T. McPherson, S. D. Mackey, and D. Moore. <i>Evaluation of the sensitivity of inventory and monitoring national parks to nutrient enrichment effects from atmospheric nitrogen deposition: Southern Plains Network (SCPN)</i>	2/1/2011
Visitor Center Environmental Assessment	4/1/2011
Kelly, Michael. <i>Final Value Analysis Report, Visitor Center Exhibits</i>	5/1/2011
Weston Solutions, Inc. <i>Veteran's Dam Revegetation Work Plan</i>	5/1/2012
Folts-Zettner, Tomye and Heidi Sosinski. <i>2013 Vegetation Monitoring Data Summary</i>	1/1/2013
Begly, A., P. S. Cook, Y. Le, and S. J. Hollenhorst. <i>Visitor Study: Summer 2012</i>	4/1/2013
Cook, P. S. <i>Impacts of Visitor Spending on the Local Economy</i>	6/1/2013
<i>Superintendent's Compendium of Designations, Closures, Permit Requirements and Other Restrictions Imposed Under Discretionary Authority</i>	4/16/2013
Cuttillo, P. A. <i>Use of the eastern Arbuckle-Simpson aquifer groundwater-flow model to protect water resources</i>	7/1/2013
University of Idaho Cooperative Park Studies. <i>2013 Visitor Survey Card Data Report</i>	7/31/2013
Lock, R., P. Valentine-Darby, H. Sosinski, and R. E. Bennetts. <i>Landbird monitoring in the Southern Plains Network: 2013 annual report</i>	2/1/2014
Tweet, J. S., V. L. Santucci, and T. Connors. <i>Paleontological resource inventory and monitoring: Southern Plains Network. Natural Resource Report NPS/SOPN/NRR—2015/971</i>	2015
Struthers, K., N. Chambers, P. Valentine-Darby, A. Mathis, D. Shorrock, N. Osborn, R. E. Bennetts, T. Folts-Zettner, and H. Sosinski. <i>Natural resource condition assessment. Natural Resource Report. NPS/SOPN/NRR—2016/1137</i>	2/1/2016

## Appendix D: Tribes Traditionally Associated with Chickasaw National Recreation Area

Traditionally associated tribes refer to those groups that have had a significant connection to a place that has endured for two generations or more. The following list was derived from the NPS Intermountain Region's tribal contact database:

- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Cheyenne and Arapaho Tribes, Oklahoma
- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Eastern Shawnee Tribe of Oklahoma
- Kickapoo Traditional Tribe of Texas
- Kickapoo Tribe of Oklahoma
- Mescalero Apache Tribe of the Mescalero Reservation, New Mexico
- Muscogee (Creek) Nation
- Pawnee Nation of Oklahoma
- Quapaw Tribe of Oklahoma
- Seminole Nation of Oklahoma
- Thlopthlocco Tribal Town
- Wichita and Affiliated Tribes

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## Intermountain Region Foundation Document Recommendation Chickasaw National Recreation Area

February 2017

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



2-6-17

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RECOMMENDED

William J. Wright, Superintendent, Chickasaw National Recreation Area

Date



3-6-17

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APPROVED

Sue E. Masica, Regional Director, Intermountain Region

Date



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

CHIC 107/137124  
March 2017

Foundation Document • Chickasaw National Recreation Area

