



# State of the Park Report

## Shiloh National Military Park Tennessee & Mississippi



2016

**On the cover:** Tennessee Monument, Shiloh Battlefield Unit

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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

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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 Shiloh National Military Park is to preserve and interpret the battlefields, sites, resources, and oral histories associated with Shiloh, Tennessee, and Corinth, Mississippi, during the Western Campaign of the Civil War.

Shiloh National Military Park (SHIL) was established on December 27, 1894, to preserve the scene of the first major battle in the Western theater of the Civil War. The two-day battle, April 6 and 7, 1862, involved about 65,000 Union and 44,000 Confederate troops, and resulted in nearly 24,000 killed, wounded, and missing. This decisive Union victory enabled United States forces to advance on and seize control of the strategic Confederate railway junction at Corinth, Mississippi, on May 30, 1862, and later to advance on and seize control of Vicksburg, Mississippi on July 4, 1863. On September 22, 2000, the Corinth Unit was made a part of Shiloh National Military Park.

Significance statements express why a park’s resources and values are important enough to merit designation as a unit of the national park system. SHIL is significant because:

- The Battle of Shiloh was the most critical and violent event in the early Civil War campaign to control western Confederate railroads and the Mississippi River Valley. As a result of the carnage at Shiloh, southerners and northerners alike realized that the divided nation faced a long, desperate, and costly war.
- As the second oldest national military park, the existing commemorative landscape on the Shiloh battlefield reflects the contributions of both Union and Confederate Civil War veterans to mark the field of battle in a manner that honors the shared sacrifice and courage of all those present.
- The intersection of two major railroad crossings at Corinth allowed Confederate armies to mass their forces in northern Mississippi, while Pittsburg Landing on the Tennessee River served as both a vital supply line and base of operation for Union forces deep in Confederate territory. Control of these transportation routes allowed the Union to remain on the offensive in the western theater, and illustrates the importance of logistics during the Civil War.
- Following the September 1862 announcement of Lincoln’s intent to issue the Emancipation Proclamation, the Union Army established the Corinth Contraband Camp, considered a model of its kind, where formerly enslaved people took their first steps from slavery to citizenship through cooperative farm programs, education, and military service.
- In October 1862, the attempt to drive Union forces from their fortified defenses at Corinth resulted in a Confederate defeat at the Battle of Corinth, the last major Confederate offensive in the state of Mississippi.
- The Shiloh Indian Mounds National Historic Landmark preserves one of the finest examples of a complete Mississippian-era archeological village site in the nation.

Fundamental and Other Important Resources and Values 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. These include:

- **Shiloh Battlefield Landscape.** Shiloh National Military Park incorporates numerous key features of the historic battlefield including the site of Shiloh Church; Fraley Field, where fighting commenced on April 6, 1862; the site of the Union camps;

the Hornets' Nest; the Confederate Memorial commemorating capture of 2,100 Union troops in the Hornet's Nest; Duncan Field; the ravine where General Albert Sidney Johnston died; the site of Grant's last line; Bloody Pond; the site of the Union field hospital; Pittsburg Landing on the Tennessee River; Dill Branch Ravine, where Union gunboats bombarded Confederate forces in defense of Grant's last line; and Water Oaks Pond, where Confederate forces attempted to blunt the Union counterattack of April 7. This fundamental resource and value is also inclusive of battlefield viewsheds and other natural resource elements, such as vegetation that contributes to integrity of the historic battlefield landscape.

- **Corinth Landscape (Siege, Battle, and Occupation).** Resources associated with the siege, battle, and occupation of Corinth are found throughout the Corinth landscape. Numerous Union and Confederate siege lines, earthworks, and fortified battery positions are protected and interpreted by the Corinth Unit. A small portion of the historic Corinth Contraband Camp is also part of the Corinth landscape and a vital link to the struggle for African American liberation during the Civil War. Other key landscape features on the Corinth Landscape include the railroad crossing and Corona Female College site.
- **Davis Bridge Site.** Located 18 miles northwest of Corinth in the state of Tennessee, five acres of the Davis Bridge battlefield site are protected by Shiloh National Military Park. While retreating from Corinth, the Confederate Army of West Tennessee under Major General Earl Van Dorn engaged Union forces led by Major General Edward O. C. Ord. Fought on October 5, 1862, the battle of Davis Bridge allowed the Confederate Army of West Tennessee to escape destruction and successfully complete their retreat from Corinth. A small gravel parking lot, interpretive signage, and a hiking trail provide access and connect visitors to the historic events that unfolded on this landscape.
- **Place of Reflection and Serenity.** The brutal history of the military engagement on the Shiloh Battlefield evokes a sense of solemnity for visitors to Shiloh National Military Park. The preserved battlefield landscape and viewsheds, and numerous monuments and memorials, provide opportunities for quiet reflection on the stories of the battle in a serene rural environment. The proximity of the Tennessee River and the accompanying natural sounds further support a deeply emotional, yet tranquil visitor experience.
- **Shiloh National Cemetery.** The Battle of Shiloh was the largest engagement in the Mississippi Valley campaign during the Civil War and saw 23,746 casualties of both Union and Confederate forces. Shiloh National Cemetery was created to bury the Union dead from the Battle of Shiloh, as well as those who died from other operations along the Tennessee River from no less than 565 different localities. The cemetery holds 3,584 Civil War dead, of which 2,359 are unknown. Included among these war dead are at least three identified Confederate soldiers removed from various war graves to be interred with the national dead. The total interred at the cemetery now stands at nearly 4,000, including veterans from later American wars. It was officially closed in 1984, but still averages two or three burials a year, mostly widows of soldiers already interred.
- **Museum Collections.** The museum collections at Shiloh National Military Park contain more than 430,000 objects related to the battlefield, including Civil War artillery, battle flags, and archival materials. They also contain archeological resources, many of which are related to the American Indian mound sites. Some of these artifacts are on display at the Shiloh Battlefield Visitor Center and the Corinth Civil War Interpretive Center, while a significant portion of the collection is stored at the NPS Southeast Archeological Center.
- **Commemorative Resources/Features.** Shiloh is one of the oldest national military parks established by Congress. The main battlefield unit contains more than 150 commemorative markers and other commemorative features. Many of these markers are dedicated to headquarters locations of the Union Army of the Tennessee commanded by Major General Ulysses S. Grant and the Army of the Ohio commanded by Major General Don Carlos Buell. A larger number of markers were dedicated on the ground where the various state units from Illinois, Indiana, Ohio, and Pennsylvania fought.
- **Archeological Resources.** The almost 4,000-acre Shiloh Battlefield unit encompasses the core of the Civil War's first major battle in the western theater. Shiloh has a potentially high concentration of archeological resources due to the extended Union encampment on "Shiloh Hill" in the spring of 1862. Besides numerous unmarked graves, the park contains five marked mass Confederate burial trenches. A series of archeological surveys have been conducted at the park since 1976, including surveys of the Shiloh battlefield site, the Battle of Corinth site, and the contraband camp near Corinth. The potential for relic hunting is an ongoing issue for park management.
- **Community Partnerships.** The importance of partners and partnerships at Shiloh National Military Park continues to grow and is considered important to the park's success. Both Hardin County in Tennessee and Alcorn County in Mississippi are

key partners vital to the preservation of the battlefield at Shiloh and the siege and battle of Corinth. Two friends groups, Friends of Shiloh National Military Park and Friends of the Siege and Battle of Corinth, actively support the park’s mission, help raise awareness, and engage in numerous stewardship efforts with the park.

- **Shiloh Indian Mounds.** Shiloh also contains the site of a prehistoric Indian mound village that is listed as a national historic landmark. About 1,100 years ago, this town of seven earthen mounds and dozens of houses enclosed by a wooden palisade occupied the high Tennessee River bluff at the eastern edge of the Shiloh plateau. This town was the center of a society that occupied a 20-mile-long stretch of the Tennessee River Valley. The inhabitants of this village moved out of this part of the Tennessee Valley sometime in the 13th century.
- **Civilian Conservation Corps / Works Progress Administration Infrastructure and Buildings.** For eight years, from 1933 through 1940, the Civilian Conservation Corps (CCC) maintained a camp at Shiloh Battlefield and conducted numerous projects within the park. CCC workers improved roads and sidewalks, maintained the stone wall around the national cemetery, and developed extensive erosion controls for historic fields, streams, and drainage systems throughout the park. The Works Progress Administration (WPA) also left its mark on the park’s landscape in the form of the current visitor center, park book store, and numerous other structures used for employee housing. This infrastructure and these buildings provide a tangible link to the legacy of the Civilian Conservation Corps and the Works Progress Administration in the development of Shiloh National Military Park.

The summary table, below, and the supporting information that follows, provide an overall assessment of the condition of priority resources and values at Shiloh National Military Park based on scientific and scholarly studies and expert opinion. The internet version of this report, available at <http://www.nps.gov/stateoftheparks/shil/>, 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	
	<b>Warrants Significant Concern</b>		<b>Condition is Improving</b>		<b>High</b>
	<b>Warrants Moderate Concern</b>		<b>Condition is Unchanging</b>		<b>Medium</b>
	<b>Resource is in Good Condition</b>		<b>Condition is Deteriorating</b>		<b>Low</b>

# State of the Park Summary Table

Priority Resource or Value	Condition Status/Trend	Rationale
<b>Natural Resources</b> <a href="#">web</a> ▶		
<b>Air Quality</b>		<p>Air pollutants are likely causing damage to monuments and other cultural resources at Shiloh National Military Park. Vistas are often obscured by pollution-caused haze. Ozone sometimes reaches levels that can make breathing difficult for sensitive groups and cause injury to ozone-sensitive plants. Vegetation communities in the park, including forest, wetland, and lichen species, may be sensitive to excess sulfur and nitrogen deposition. Airborne toxics, including mercury, can deposit with rain and snow and accumulate in organisms, such as amphibians and birds.</p>
<b>Water Quality</b>		<p>Park waters, with the exceptions of Owl Creek and the Tennessee River, originate in-park and are considered “pristine.” The streams located on Shiloh battlefield are the most undisturbed of the lower Tennessee and thus serve as a regional benchmark of the pristine condition.</p>
<b>Plant Communities</b>		<p>More than 700 species of vascular plants and 27 distinct vegetation communities have been identified in the park. The park also contains the largest wetland complex (i.e., Owl Creek) within the Cumberland Piedmont Network. Invasive exotic species are arguably the biggest threat to the overall health of plant communities on the park. Forest pests (such as gypsy moth) are not considered an immediate threat at this time. With the recent initiation of forest monitoring, data will be available in the near future to monitor these and other threats, as well as general forest health and trends.</p>
<b>Wildlife Communities</b>		<p>The park contains a diverse array of habitats. This is reflected in the high numbers of amphibians, fish, birds, and mammals on the park’s species list. In short, biodiversity in the park is reflective of what is known from western Tennessee making it an important area for conserving biodiversity within the region.</p>
<b>Dark Night Skies</b>		<p>The modeled Anthropogenic Light Ratio (ALR), a measure of light pollution calculated as the ratio of median Anthropogenic Sky Glow to average Natural Sky Luminance, was 2.08, which is considered a poor condition. Trend is neutral based on slow population growth (2%) of the Memphis metropolitan statistical area. The Nashville-Davidson-Murfreesboro-Franklin Metropolitan statistical area grew rapidly (30%) from 2008 to 2013. However, the impact to the park is minimized based on distance from these major metropolitan areas, and therefore the park staff believes a more appropriate rating for Dark Night Skies is moderate concern. Park lands in Alcorn County, MS, lie mostly within the Corinth city limit. With a population of 14,500, Corinth presents visible negative impacts to the darkness of the night sky according to staff observation.</p>
<b>Acoustic Environment</b>		<p>The mean acoustic impact level (L50 dBA), a measure of noise contributed to the existing acoustic environment by man-made sources, is 1.5 dBA. Overall, long-term projected increases in ground-based transportation, aircraft traffic, and other man-made sources may indicate a downward trend in the quality of acoustic resources at this location.</p>

Priority Resource or Value	Condition Status/Trend	Rationale
Adjacent Land Cover and Use		Majority of land surrounding Shiloh battlefield is classified as natural cover. With the exception of within and near Corinth, the park lies within a relatively large undeveloped area. The recent acquisition of over 1,000 acres of lands authorized for the park in Hardin County, TN, preserves and protects historic battlefield resources and provide additional buffer for the core Shiloh battlefield.
<b>Cultural Resources</b> <a href="#">web ▶</a>		
Archeological Resources		The park has nine known archeological sites. The extant archeological resources preserved within these sites, beginning with prehistoric resources (e.g. Shiloh Indian Mounds National Historic Landmark, Mississippian ≈ 950–1350 AD) and continuing through the prominent Civil War period are documented to be in good condition on the Shiloh Battlefield Unit. Specific prehistory data for the park’s Corinth Battlefield Unit in Mississippi is relatively unknown, but the Civil War archeological resources are deemed in good condition based on recent field survey and data assessment.
Cultural Anthropology		The park maintains an official relationship with the Chickasaw Nation of Oklahoma, with a memorandum of understanding with the Chickasaw concerning archeology investigations pursuant to the Native American Graves Repatriation Act (NAGPRA) for Shiloh Indian Mounds National Historic Landmark. No specific ethnographic study has been conducted relative to the Chickasaw or other tribes concerning their probable ancestral habitation of park lands prior to 1818. The Shiloh Battlefield Unit resides in direct relation to two routes of the Trail of Tears National Historic Trail (e.g. the Bell Party, which moved overland through nearby Savannah, Tennessee, and a primary water route for the trail via the Tennessee River).
Cultural Landscapes		Park cultural landscapes have not been assessed in their entirety, and the park lacks a Cultural Landscape Inventory or respective specific studies for every landscape with extant resources. Stewardship of the core Shiloh battlefield since 1894 has preserved all significant landscapes possessing cultural resources. These landscapes include a significant prehistoric layer (e.g. Mississippian mounds and village) and extend through the prominent American Civil War period to include post-war habitation of the battlefield and the commemorative landscape features residing on park lands. Documentation for these landscapes is extremely good, dating to 1862, and numerous archeological investigations have been conducted on the park. Corinth landscapes lack thorough documentation, but investigations performed since 1990 document the Civil War landscape preserved by the park’s Corinth Battlefield Unit are in good condition. Pre-Columbian landscape data for Corinth lacks documentation.
Historic Structures		SHIL has 228 structures on the List of Classified Structures (LCS), with a total of 217 cited in good condition. The list actually includes several thousand individual structures at the Shiloh Battlefield Unit, as features like headstones in Shiloh National Cemetery and commemorative War Department tablets are cited as groups and not individually as structures. No Corinth structures are yet included on the park’s LCS. Condition assessment for the Corinth structures (e.g. earth fortifications, commemorative features, etc.) eligible for inclusion on the LCS cites the majority of resources being in either good or fair condition.

Priority Resource or Value	Condition Status/Trend	Rationale
History		Documentation of all history themes (Civil War, Native American, etc.) associated with the park is extensive, dating back to the mid-19th century; with a significant increase in documentation relevant to the park for all history theme categories in the last quarter century. An agency sponsored Historic Resource Study is nearing completion and an older existing Administrative History (1954) is being updated to carry documentation of the administration of the park through 2010. This document has proceeded beyond 75% draft review.
Museum Collections		Shiloh Museum Collections maintained at the park and the Southeast Archeology Center, totaling 430,803 items, is documented to be in good condition. 73.24% of the collection is cataloged, but the park needs a park-wide archival survey and records management plan, and subsequent processing work, to update current information. The park has a recently updated Museum Collections Management Plan (2010), which cites recommendations to improve preservation and maintenance of the collection. A total of 95% (e.g. 164/172) of the applicable Museum Collections Standards governing management of the Shiloh collection were cited as being met in the park's Annual Preservation Checklist (ACP).
<b>Visitor Experience</b> <a href="#">web</a> ▶		
Number of Visitors		Visitors to the park in 2013 increased significantly (42%) compared to the 10-year average for 2003–2012.
Visitor Satisfaction		The percentage of visitors satisfied in FY13 was 100.0%, which is slightly higher (1.6%) than the average for the previous ten years
Interpretive and Education Programs – Talks, Tours, and Special Events		Shiloh annually provides a significant quantity of diverse Interpretive and Education programs. In 2014, a total of 1,017 personal services were provided to 130,954 visitors. Of these, a total of 172 education programs were provided to 9,934 students. However, the drain on manpower experienced since 2010 has adversely impacted the quantity of personal programs provided and the number of visitors the park is able to serve, as total staff work years available to provide personal services have decreased from a high of 10.3 in 2010 to 7.9 in 2014. Park has managed to maintain permanent interpretive staffing levels, but is losing ground in funding temporary employees to provide personal services.
Interpretive Media – Brochures, Exhibits, Signs, and Website		Since 2004, park has operated the Corinth Civil War Interpretive Center with state of the art exhibits and four interpretive films have been produced. A new interpretive shelter and wayside trail for Shiloh Indian Mounds National Historic Landmark was constructed. Park social media program provides daily posts on Facebook, twitter, and the website. Thirty-two new wayside exhibits are in production for Shiloh battlefield, with installation scheduled for 2015. Directional signage is up to date and the Shiloh battlefield audio tour will be updated in 2015. Future planned improvements include: non-personal interpretive media at Shiloh Battlefield Visitor Center; a new accessibility plan; and updated brochures, wayside exhibits, and directional signage for the Corinth Unit.
Scenic Resources		Shiloh Battlefield is renowned for being one of the most pristine battlefields in the country due to lack of encroachment by urban development. The battlefield's excellent condition adds value to the interpretation of Shiloh's story.

Priority Resource or Value	Condition Status/Trend	Rationale
Accessibility		Visitors have mobility accessibility to all public facilities and interior exhibits. Current wayside exhibit project for Shiloh battlefield will upgrade and provide accessibility to all battlefield exhibits associated with the auto tour route. All audio-visual media at the Corinth Civil War Interpretive Center is being renovated for visual and hearing impaired accessibility.
Safety		Park has maintained a solid safety record with the Interpretation and Education Program. Visitors receive safety notices along with the park brochure, and safety notices are provided through all social media formats. Climate and severe weather updates are posted at Information & Orientation stations when warranted. Park's historic weapons firing demonstration program maintains required safety levels.
Partnerships		Park maintains and coordinates a partnership program in relation to Interpretation and Education Services with various entities. These partnerships are reflected through technical assistance and support provided for planning and designing of interpretive exhibits, brochures, social media, symposiums, special events, historic preservation of sites and commemorative features, research, etc.
<b>Park Infrastructure</b> <a href="#">web</a> ▶		
Overall Facility Condition Index		The overall FCI Condition Index of the park for FY 2014 is .020 for 110 assets, which is Good based on industry and NPS standards.

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

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

### Natural Resources

- Cumberland Piedmont Network completed inventories of vascular plants ([2004](#)), wetlands ([2008](#)), amphibians and reptiles ([2006](#)), birds ([2006](#)), and mammals ([2007](#)) for the park.
- Updated Fire Management Plan (2013) including the addition of prescribed burns as an effective forest management tool to reduce heavy fuels, etc. First successful burn in the modern era of park management occurred in 2014 (~ 170 acres), with a successful second larger burn in 2015 (~ 390 acres). Burns reduced buildup of heavy fuels and minimized thick forest duff.
- Exotic plant treatment and reduction occurs on an annual basis; and the Exotic Plant Management Team was in the park to reduce invasive plants in 2005, with additional cyclic reduction of invasive plants at various park locations annually since.
- The presence of a nesting pair of bald eagles on Shiloh battlefield has generated considerable public interest in park natural resources and their relevant value, including creation of several private websites specific to the Shiloh eagles and park nature photography.

### Cultural Resources

- The Land and Water Conservation Fund Battlefield program funded land acquisition in 1989–1990 to strengthen preservation, interpretation and education of the history of the battles of Shiloh and Corinth (~ 150 acres). This important first step led all subsequent modern efforts to acquire remaining lands within the authorized boundary for Shiloh battlefield and the initial preservation of the Corinth battlefield sites.
- The Civil War Trust has purchased for preservation about 2,800 acres at Shiloh, Fallen Timbers, Corinth, and Davis Bridge since 1990.

- Provide support for the acquisition, preservation, interpretation, and education concerning Parker’s Crossroads, Brice’s Crossroads, Britton’s Lane, Iuka, Fort Henry, and Davis Bridge battlefields in West Tennessee and north Mississippi. Work in this area has expanded and enhanced the context of cultural resource preservation on about 3,000 acres of nationally significant Civil War sites in the southeast region since 1990.
- Restored nearly 100 War Department cast iron historical camp, troop position, and small markers across Shiloh battlefield since 2000.
- Within the Shiloh National Cemetery, performed preservation, maintenance, and headstone realignment projects (2011–2012).

#### **Partnerships**

- Siege and Battle of Corinth Commission: 25+ year association for preservation, planning, management, interpretation, education, special events, etc. in Alcorn County and Corinth Mississippi.
- Friends of Shiloh Battlefield: 20+ year association that has aided battlefield preservation, land acquisition, resource management, interpretation, and commemoration of the park’s Shiloh Battlefield Unit and related historic sites off the park.
- Tennessee River Museum and Team Hardin County: 20+ year effective partnership to provide meaningful education and recreational experiences for the visiting public on area, county, and park history.
- Presented the Corinth Contraband Camp Symposium (two days of events in 2014, partnering with the City of Corinth, Mississippi State University, and numerous partners serving nearly 1,200 visitors).

#### **Visitor Experience**

- Design and construction of the Corinth Civil War Interpretive Center (completed 2004). This 15,000 square ft. Center contains state of the art exhibits related to the causes, events, people and consequences relevant to the compelling history of Corinth and the Civil War in the West, two exhibit films and related AV, graphic exhibits and integrated interior and exterior visitor experience.
- Shiloh Indian Mounds NHL Interpretive Shelter and Trail Wayside Exhibits (2009) opened the core area of the village to increased visitor use, utilizing data recovered from recent archeological investigations of the NHL resources.
- Constructed the Corinth Contraband Camp Commemorative/Interpretive Trail (2009).
- Produced new award winning orientation film for the Shiloh Battlefield Visitor Center: *Shiloh – Fiery Trial* (2012); and new orientation film for the Corinth Civil War Interpretive Center: *Corinth: A Town Amidst War* (2013).

#### **Park Infrastructure**

- Constructed new concrete bridge and paved three historic roads at the Shiloh battlefield, opening the northern section of the park to daily use.
- Riverbank stabilization along Dill Branch enabled vehicle access to the Indian Mounds.
- Removed asbestos-containing floor tile in the Visitor Center, and replaced with vinyl tile and recycled carpet.
- Installed energy efficient HVAC systems in the Shiloh Bookstore, Cemetery House and four housing units.
- Replaced older vehicles with new hybrid, flex-fuel, and electric vehicles to lower fossil fuel costs.
- Installed new synthetic slate tile roof covering on the Shiloh Visitor Center. This tile, made of recycled rubber and plastics, is sustainable and environmentally friendly.
- Replaced all split rail fencing through volunteer and seasonal work crews.

# Key Issues and Challenges for Consideration in Management Planning

Shiloh National Military Park has completed a variety of significant planning efforts over the last several years, including a Park Asset Management Plan (2008), Long Range Interpretive Plan (2009), Museum Collection Plan (2010), Museum Security and Fire Protection Survey (2012), Fire Management Plan (2013), Structural Fire Plan (2013), Wayside Exhibit Plan (2014), and a Housing Needs Assessment (2014). These plans and other initiatives, as well as work toward the 2016 Centennial of the Park Service, have helped to form a strategic vision for the park.

Key issues and challenges facing the park, by category:

## Improving Park Interpretation

In general, park interpretation is excellent. A new award winning film, *Shiloh – Fiery Trial*, recently replaced the 1956 production film, 32 new waysides are in production for Shiloh Battlefield, and auto signage is up to date. However, the exhibits in the Shiloh Battlefield Visitor Center are very dated (circa 1989), and the facility is in dire need of upgrade to incorporate modern interpretive standards and themes. In addition, a new access plan with signage for all properties located in the Corinth Battlefield Unit is needed to orient visitors to the various discontinuous sites that make up the unit.

The park social media program is strong. Shiloh leads all National Park Service Civil War sites in visitors served by social media, with Total Park “followers” on Twitter approaching 3,000, and over 20,000 likes on Facebook. The park continues to seek expanded opportunities in the social media arena, with ideas such as park web-based tours, on-demand video, and QR-code links at interpretive sites actively being pursued.

Following the September 1862 announcement of Lincoln’s intent to issue the Emancipation Proclamation, the Union Army established the Corinth Contraband Camp, where formerly enslaved people took their first steps from slavery to citizenship. The park preserves a small portion of this camp, and the site includes a walking trail, a small parking area, and life-sized bronze sculpture, but has had difficulty attracting an audience to the site to present the Civil War-to-Civil Rights story. Improvements to parking, site security, and interpretive programs are all needed.

## Improving Park Protection and Integrity

As the second oldest national military park, the existing commemorative landscape on the Shiloh battlefield reflects the contributions of both Union and Confederate Civil War veterans to mark the field of battle in a manner that honors the shared sacrifice and courage of all those present. Not all of the land authorized within the park boundary is owned by the federal government, and acquisition of the remaining parcels is critical to protection of the integrity of the park. Potential sites that could be added to the park include: additional sites, historic houses, and resources in and around Corinth; 1,100 additional acres at Davis Bridge; 660 acres at Russell House; 440 acres at Fallen Timbers; and sites associated with Parkers Crossroads as an affiliated area. Any future land acquisitions would present operational and stewardship challenges given the limitations of current staffing levels and existing funding.

The park manages historic sites and resources in both Tennessee and Mississippi, resulting in the challenge of working with multiple local law enforcement agencies. Building better working relationships with local law enforcement agencies, addressing jurisdictional challenges, formalizing jurisdictional agreements, and seeking joint training are all important needs to address these challenges.

The park would benefit from the completion of a Cultural Landscape Inventory and Report. No formal, specifically themed, cultural landscape inventories exist for Shiloh or Corinth, and proper management and protection of these resources require better data related to the historical cultural context of the sites.

## Improving Partnerships

The Shiloh Indian Mounds National Historic Landmark (NHL) located within the boundary of the park preserves one of the finest examples of a complete Mississippian-era archeological village site in the nation. The park has a Memorandum of Understanding in place concerning archeological investigations and Native American Graves Protection and Repatriation Act protections, but the relationship with the Chickasaw Nation has waned, primarily due to the change of key personnel within the tribe and the park. The park needs to rekindle this relationship and cultivate a closer bond to provide for greater cooperation and mutual benefit.

The park maintains productive partnership programs with a multitude of groups, and actively participates in and provides technical assistance and support for planning and designing of interpretive exhibits, brochures, social media, symposiums, special events, and historic preservation of sites and commemorative features. The importance of partners and partnerships at Shiloh National Military Park continues to grow and is important to the park’s success. Additional growth in partners is possible by reaching out to the Pickwick area, communities surrounding the Davis Bridge and Fallen Timbers sites, and private organizations with an interest in the Civil War (such as the Sons of Confederate Veterans and United Daughters of the Confederacy).

# Chapter 1. Introduction

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

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

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

Shiloh National Military Park (SHIL) was established on December 27, 1894, to preserve the scene of the first major battle in the Western theater of the Civil War. The two-day battle, April 6 and 7, 1862, involved about 65,000 Union and 44,000 Confederate troops, and resulted in nearly 24,000 killed, wounded, and missing. This decisive Union victory enabled United States forces to advance on and seize control of the strategic Confederate railway junction at Corinth, Mississippi, on May 30, 1862, and later to advance on and seize control of Vicksburg, Mississippi on July 4, 1863. On September 22, 2000, the Corinth Unit was made a part of Shiloh National Military Park.

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. SHIL is significant because:

1. The Battle of Shiloh was the most critical and violent event in the early Civil War campaign to control western Confederate railroads and the Mississippi River Valley. As a result of the carnage at Shiloh, southerners and northerners alike realized that the divided nation faced a long, desperate, and costly war.
2. As the second oldest national military park, the existing commemorative landscape on the Shiloh battlefield reflects the contributions of both Union and Confederate Civil War veterans to mark the field of battle in a manner that honors the shared sacrifice and courage of all those present.
3. The intersection of two major railroad crossings at Corinth allowed Confederate armies to mass their forces in northern Mississippi, while Pittsburg Landing on the Tennessee River served as both a vital supply line and base of operation for Union forces deep in Confederate territory. Control of these transportation routes allowed the Union to remain on the offensive in the western theater, and illustrates the importance of logistics during the Civil War.
4. The Corinth Unit of Shiloh National Military Park preserves and protects the few surviving examples of early earthen fortifications that foreshadowed the complex trench warfare that would come to define the final desperate year of the Civil War.
5. Following the September 1862 announcement of Lincoln's intent to issue the Emancipation Proclamation, the Union Army established the Corinth Contraband Camp, considered a model of its kind, where formerly enslaved people took their first steps from slavery to citizenship through cooperative farm programs, education, and military service.
6. In October 1862, the attempt to drive Union forces from their fortified defenses at Corinth resulted in a Confederate defeat at the Battle of Corinth, the last major Confederate offensive in the state of Mississippi.

Fundamental and Other Important Resources and Values 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. These include:

**Shiloh Battlefield Landscape.** Shiloh National Military Park incorporates numerous key features of the historic battlefield including the site of Shiloh Church; Fraley Field, where fighting commenced on April 6, 1862; the site of the Union camps; the Hornets' Nest; the Confederate Memorial commemorating capture of 2,100 Union troops in the Hornet's Nest; Duncan Field; the ravine where General Albert Sidney Johnston died; the site of Grant's last line; Bloody Pond; the site of the Union field hospital; Pittsburg Landing on the Tennessee River; Dill Branch Ravine, where Union gunboats bombarded Confederate forces in defense of Grant's last line; and Water Oaks Pond, where Confederate forces attempted to blunt the Union counterattack of April 7. This fundamental resource and value is also inclusive of battlefield viewsheds and other natural resource elements, such as vegetation that contributes to integrity of the historic battlefield landscape.

**Corinth Landscape (Siege, Battle, and Occupation).** Resources associated with the siege, battle, and occupation of Corinth are found throughout the Corinth landscape. Numerous Union and Confederate siege lines, earthworks, and fortified battery positions are protected and interpreted by the Corinth Unit. A small portion of the historic Corinth Contraband Camp is also part of the Corinth landscape and a vital link to the struggle for African American liberation during the Civil War. Other key landscape features on the Corinth Landscape include the railroad crossing and Corona Female College site.

**Davis Bridge Site.** Located 18 miles northwest of Corinth in the state of Tennessee, five acres of the Davis Bridge battlefield site are protected by Shiloh National Military Park. While retreating from Corinth, the Confederate Army of West Tennessee under Major General Earl Van Dorn engaged Union forces led by Major General Edward O. C. Ord. Fought on October 5, 1862, the battle of Davis Bridge allowed the Confederate Army of West Tennessee to escape destruction and successfully complete their retreat from Corinth. A small gravel parking lot, interpretive signage, and a hiking trail provide access and connect visitors to the historic events that unfolded on this landscape.

**Place of Reflection and Serenity.** The brutal history of the military engagement on the Shiloh Battlefield evokes a sense of solemnity for visitors to Shiloh National Military Park. The preserved battlefield landscape and viewsheds, and numerous monuments and memorials, provide opportunities for quiet reflection on the stories of the battle in a serene rural environment. The proximity of the Tennessee River and the accompanying natural sounds further support a deeply emotional, yet tranquil visitor experience.

**Shiloh National Cemetery.** The Battle of Shiloh was the largest engagement in the Mississippi Valley campaign during the Civil War and saw 23,746 casualties of both Union and Confederate forces. Shiloh National Cemetery was created to bury the Union dead from the Battle of Shiloh, as well as those who died from other operations along the Tennessee River from no less than 565 different localities. The cemetery holds 3,584 Civil War dead, of which 2,359 are unknown. Included among these war dead are at least three identified Confederate soldiers removed from various war graves to be interred with the national dead. The total interred at the cemetery now stands at nearly 4,000, including veterans from later American wars. It was officially closed in 1984, but still averages two or three burials a year, mostly widows of soldiers already interred.

**Museum Collections.** The museum collections at Shiloh National Military Park contain more than 430,000 objects related to the battlefield, including Civil War artillery, battle flags, and archival materials. They also contain archeological resources, many of which are related to the American Indian mound sites. Some of these artifacts are on display at the Shiloh Battlefield Visitor Center and the Corinth Civil War Interpretive Center, while a significant portion of the collection is stored at the NPS Southeast Archeological Center.

**Commemorative Resources/Features.** Shiloh is one of the oldest national military parks established by Congress. The main battlefield unit contains more than 150 commemorative markers and other commemorative features. Many of these markers are dedicated to headquarters locations of the Union Army of the Tennessee commanded by Major General Ulysses S. Grant and the Army of the Ohio commanded by Major General Don Carlos Buell. A larger number of markers were dedicated on the ground where the various state units from Illinois, Indiana, Ohio, and Pennsylvania fought.

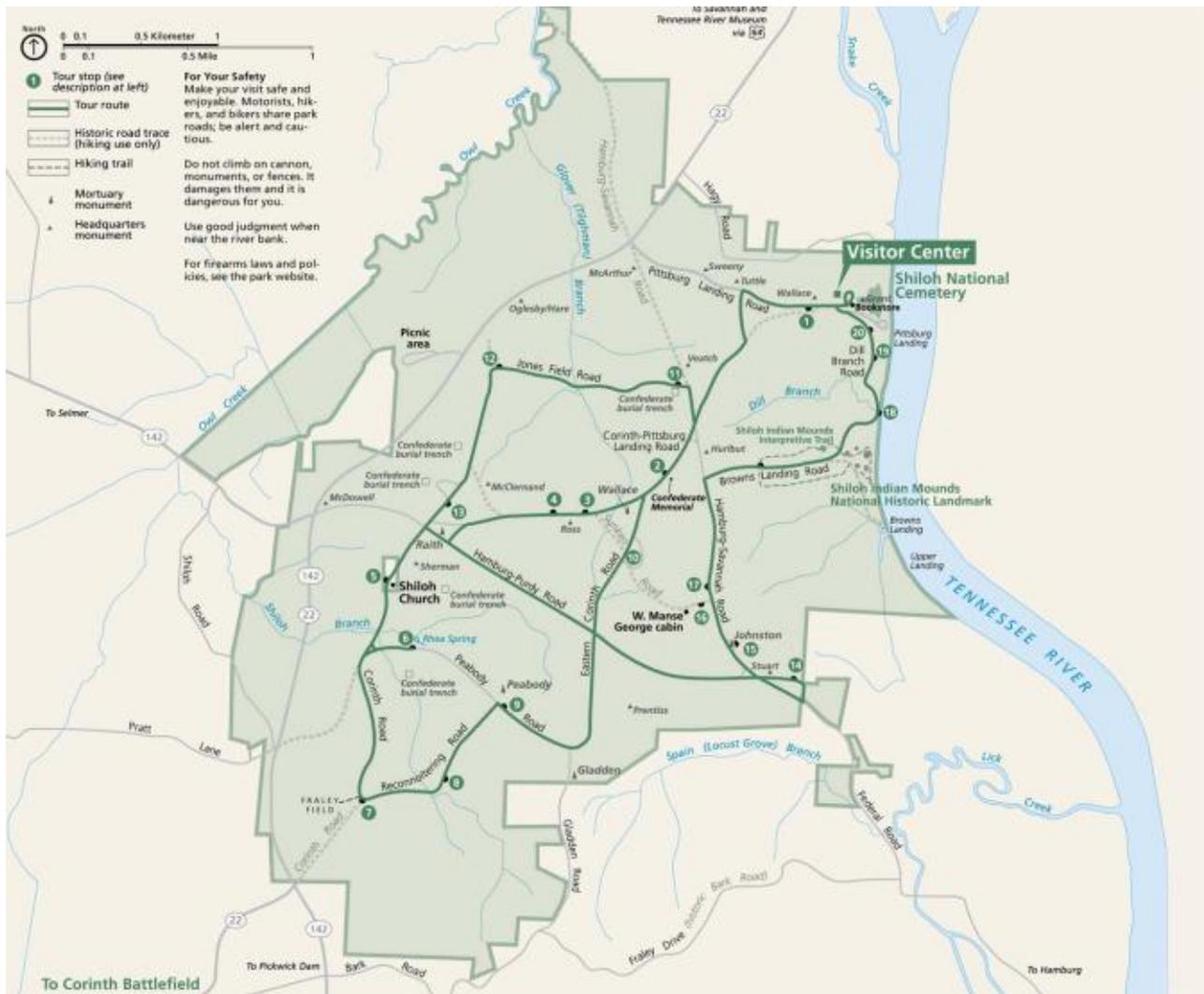
**Archeological Resources.** The almost 4,000-acre Shiloh Battlefield unit encompasses the core of the Civil War's first major battle in the western theater. Shiloh has a potentially high concentration of archeological resources due to the extended Union encampment on "Shiloh Hill" in the spring of 1862. Besides numerous unmarked graves, the park contains five marked mass Confederate burial trenches. A series of archeological surveys have been conducted at the park since 1976, including surveys of the Shiloh battlefield site, the Battle of Corinth site, and the contraband camp near Corinth. The potential for relic hunting is an ongoing issue for park management.

**Community Partnerships.** The importance of partners and partnerships at Shiloh National Military Park continues to grow and is considered important to the park's success. Both Hardin County in Tennessee and Alcorn County in Mississippi are key partners vital

to the preservation of the battlefield at Shiloh and the siege and battle of Corinth. Two friends groups, Friends of Shiloh National Military Park and Friends of the Siege and Battle of Corinth, actively support the park’s mission, help raise awareness, and engage in numerous stewardship efforts with the park.

**Shiloh Indian Mounds.** Shiloh also contains the site of a prehistoric Indian mound village that is listed as a national historic landmark. About 1,100 years ago, this town of seven earthen mounds and dozens of houses enclosed by a wooden palisade occupied the high Tennessee River bluff at the eastern edge of the Shiloh plateau. This town was the center of a society that occupied a 20-mile-long stretch of the Tennessee River Valley. The inhabitants of this village moved out of this part of the Tennessee Valley sometime in the 13th century.

**Civilian Conservation Corps / Works Progress Administration Infrastructure and Buildings.** For eight years, from 1933 through 1940, the Civilian Conservation Corps (CCC) maintained a camp at Shiloh Battlefield and conducted numerous projects within the park. CCC workers improved roads and sidewalks, maintained the stone wall around the national cemetery, and developed extensive erosion controls for historic fields, streams, and drainage systems throughout the park. The Works Progress Administration (WPA) also left its mark on the park’s landscape in the form of the current visitor center, park book store, and numerous other structures used for employee housing. This infrastructure and these buildings provide a tangible link to the legacy of the Civilian Conservation Corps and the Works Progress Administration in the development of Shiloh National Military Park.



Map of the Park

# Chapter 2. State of the Park

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

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

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

NOTE: The inventorying of Shiloh National Military Park’s natural resources began before the newer properties at the Davis Bridge Battlefield, Battle and Siege of Corinth sites, and additional lands at Shiloh Battlefield were officially acquired. As a result, the first four priority resources in the natural resources section 2.1 (air quality, water quality, and plant and wildlife communities) refer only to the resources observed within the Shiloh Battlefield boundary as it existed in 2002. The dark night skies and adjacent land cover and use priority resources are model-based measures specifically for Shiloh Battlefield. The acoustic environment rationale is based on observations by park staff because no quantitative data currently exists. All rationale within the natural resource indicators that mention Corinth and Davis Bridge park properties are also based on observations by park staff because no quantitative data currently exists (with the exception of human population density and demographics).

## 2.1. Natural Resources

Air Quality  <a href="#">web</a> ►			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Ozone Foliar Injury	Number of species with injury		Ground level ozone is a pollutant that is harmful to human and vegetative health. In 2009, seven species known to be sensitive to ozone damage were surveyed for damage. Damage was detected on two of these species (blackberry and sweetgum). Repeat sampling has not yet been conducted, trend data are not available.

<p><b>Deposition</b></p>	<p>Sulfur Wet Deposition</p>		<p>Wet sulfur deposition warrants significant concern. This condition is based on NPS Air Resource Division benchmarks of 3.7 kilograms per hectare per year (kg/ha/yr) (<a href="#">NPS-ARD 2015</a>). Some lichens are especially sensitive, with documented effects occurring in the deposition range of only a few kilograms of sulfur per hectare per year. Sugar maple trees (<i>Acer saccharum</i>), which are found in the park, are known to be particularly sensitive (<a href="#">Sullivan et al. 2011a</a>). Acidification can also cause damage to stone, painted, and metal monuments and other cultural resources (<a href="#">Charola 1998</a>). The degree of confidence at Shiloh NMP is medium because estimates are based on interpolated data from more distant deposition monitors. No trend is shown due to a limited amount of available monitoring data.</p>
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## Resource Brief: Climate Change Effects at Shiloh National Military Park

Climate change is ongoing and past greenhouse gas emissions, long residence times of these gases in the atmosphere, and our current emissions trajectory suggest that future climate change will be substantial (Wigley 2005, Peters et al. 2013). Even if greenhouse gas emissions are dramatically reduced in the future, Shiloh National Military Park will continue to experience impacts from ongoing changes. Although the precise magnitude of these changes cannot be predicted, many trends are already detectable and can be incorporated into planning efforts.

Warming temperatures mean not only increases in average temperature but also increases in extreme daily high temperatures ([Kunkel et al. 2013](#)). A shift of only a few degrees from mid 80s (°F) to low 90s can move visitors from a “Caution” to “Extreme Caution” zone according to the National Oceanic and Atmospheric Administration’s Heat Index. More frequent hot spells may especially be of concern to elderly visitors and other sensitive groups. Heat waves are also linked to unhealthy ozone levels, and this is particularly important for Shiloh National Military Park where ozone is already a concern. Higher levels of ozone could cause foliar damage to the vegetation at the Site.

The forests in and around Shiloh National Military Park are likely to change due to a warming climate in conjunction with other stressors such as tree pests ([Fischelli et al. 2014](#)). Habitat suitability for various tree species in the region may increase, decrease, or remain unchanged under future conditions. The table below provides tree habitat suitability projections for select species at Shiloh. Projections are for the year 2100 under two climate scenarios (“least change” and “major change”) that bracket a range of plausible future conditions based on greenhouse gas emissions and global climate model projections. Habitat suitability projections for 72 tree species at Shiloh and for trees at 120 other eastern U.S. parks are available at <http://science.nature.nps.gov/climatechange/>.

### Potential changes in habitat suitability (2100 compared with 1990) for select tree species in Shiloh National Military Park.

Habitat change class designations are based on two future climate scenarios (the “least change” scenario represents strong cuts in greenhouse gas emissions and modest climatic changes and the “major change” scenario represents continued increasing greenhouse gas emissions and rapid warming). Change class designations are based on the ratio of future (2100) to baseline (1990) habitat suitability (output from the U.S. Forest Service Climate Change Tree Atlas).

Scientific Name	Common Name	Least Change Scenario	Major Change Scenario
<i>Acer rubrum</i>	red maple	Small decrease	No change
<i>Carya glabra</i>	pignut hickory	Large decrease	Small decrease
<i>Carya tomentosa</i>	mockernut hickory	No change	No change
<i>Juniperus virginiana</i>	eastern redcedar	Small decrease	Small decrease
<i>Liquidambar styraciflua</i>	sweetgum	No change	No change
<i>Liriodendron tulipifera</i>	yellow-poplar	Large decrease	Small decrease
<i>Nyssa sylvatica</i>	blackgum	Small increase	Small increase
<i>Pinus echinata</i>	shortleaf pine	Small increase	Small increase
<i>Pinus taeda</i>	loblolly pine	Small increase	Small increase
<i>Quercus alba</i>	white oak	Small decrease	Small decrease
<i>Quercus falcata var. falcata</i>	southern red oak	No change	No change
<i>Quercus stellata</i>	post oak	Large increase	Large increase
<i>Ulmus alata</i>	winged elm	No change	Small increase

Longer growing seasons will increase the risk of insect outbreaks and expand ranges of some species such as scale insects and cankerworm (Ingram 2013, Frank, S.D. in press). Near-term (2013–2027) disease and pest risks for the Site include oak decline and emerald ash borer (Krist et al. 2014). Warming temperatures are predicted to increase evapotranspiration, drying forest vegetation and increasing wildfire risk. Increased evapotranspiration may also reduce streamflow (Ingram 2013).

Climate change may increase risk from invasive plant species. Longer growing seasons and shorter cold snaps may allow invaders to expand into new ranges (Ingram 2013). Undesirable species that could impact the Site and are likely to benefit from climate change include kudzu (*Pueraria lobata*), privet (*Ligustrum sinense*; *L. vulgare*), and cogongrass (*Imperata cylindrical*) (Bradley et al. 2010).

A changing climate will also affect aquatic systems in and around Shiloh (TWRA 2009). For example, high-intensity rain events are likely to continue becoming more common, causing increased turbidity, erosion, and flushing of contaminants in streams and rivers (Treasure et al. 2008, Jacobs et al. 2001). Increasing water temperatures also have multiple potential effects, including decreases in dissolved oxygen, expansion of nonnative invasive fish currently located further south, and increased outbreaks of native and introduced diseases (TWRA 2009).

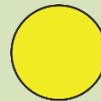
A review of the gray bat (*Myotis grisescens*) by the U.S. Fish and Wildlife Service biologists at Columbia, Missouri notes that the gray bat has a fairly narrow geographic range, with 95% of the species range-wide population confined to only nine caves. Preferred temperatures are approximately 1–9 degrees Celsius (Tuttle and Kennedy 2005, USFWS 2006). The relatively narrow ecological habitat could make them susceptible to climate change. Adams (2010) studied trends in bat reproduction and temperature and precipitation variability in the west and noted declines in bats when annual environmental conditions mimic the long-term predictions of regional climate change models.

The National Audubon Society (2015) predicts that the bald eagle (*Haliaeetus leucocephalus*) will only have 26% of its current summer range remaining by 2080; however it could recover 73% of summer range in new areas opened up by a shifting climate. The Midwest and Appalachian Mountains appear to be predicted to experience much of the change. While the science on climate change impacts to the bald eagle is still relatively new, closely tracking the few birds in Shiloh National Military Park is advisable.

Effective climate change adaptation requires collaboration among land managers across large landscapes. The [Gulf Coast Plains and Ozarks Landscape Conservation Cooperative](#) is one of a network of Cooperatives planning for a sustainable landscape in the face of climate change. The Cooperative is a good place to find partners to work together to adapt natural and cultural resources to climate change.

Water Quality  <a href="#">web</a> ▶			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Water Chemistry	Core Parameters (pH, Dissolved Oxygen, temp., specific conductivity, acid neutralizing capacity, and <i>E. coli</i> ).		Measurements meet state standards and/or are within the natural range of park conditions. No trend is shown due to limited availability of monitoring data.

# Plant Communities



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p><b>Exotic Plants</b></p>	<p>Number and prevalence of invasive exotic species</p>		<p>Species that have been introduced or moved by human activities to a location where they do not naturally occur are termed exotic. A subset of these is considered invasive because they have the ability to outcompete and replace native species. Nordman (2004) believed these species “may be the biggest single threat to the overall ecological health of the park.” Recent monitoring by the Cumberland Piedmont Network (2013a) detected exotic species within a majority of plots on SHIL with the two most common species (Japanese honeysuckle and Chinese privet) being considered “severe threats” by the Tennessee Exotic Pest Plant Council. A total of 28 invasive exotic species have been documented in the park (Nordman 2004). No trend is shown due to limited availability of monitoring data.</p>
<p><b>Wetland and Riparian Communities</b></p>	<p># and Area of Wetlands, Quality and Functions of Wetlands</p>		<p>Roberts and Morgan (2008) documented 81 wetlands at SHIL, totaling an estimated 376.63 acres in size. The largest and most significant wetland at SHIL is the 315-acre bottomland hardwood complex associated with Owl Creek at the northern end of the park. Despite heavy agriculture north of Owl Creek, the site is in relatively good condition and likely supports a great variety of wetland plant species and habitat types for amphibians. It also ranked high for functioning as a study area for a variety of wetland research topics. However, this and 63 other wetlands at SHIL were occupied by exotic plant species, especially Japanese stiltgrass. No trend is shown due to limited availability of monitoring data.</p>
<p><b>Forest Community</b></p>	<p>Diversity and structure</p>		<p>As pointed out by Nordman (2004) the park contains significant natural resources, especially in hardwood forests. Forest monitoring was initiated by Cumberland Piedmont Network in 2011. While baseline data indicate some potential concerns related to oak regeneration and limited number of snags (which are important for many wildlife species), the forests are diverse and can generally be considered in good condition. As plots are re-sampled (beginning in 2016) additional data will be available and general trends can begin to be assigned.</p>

## Resource Brief: Owl Creek Wetland

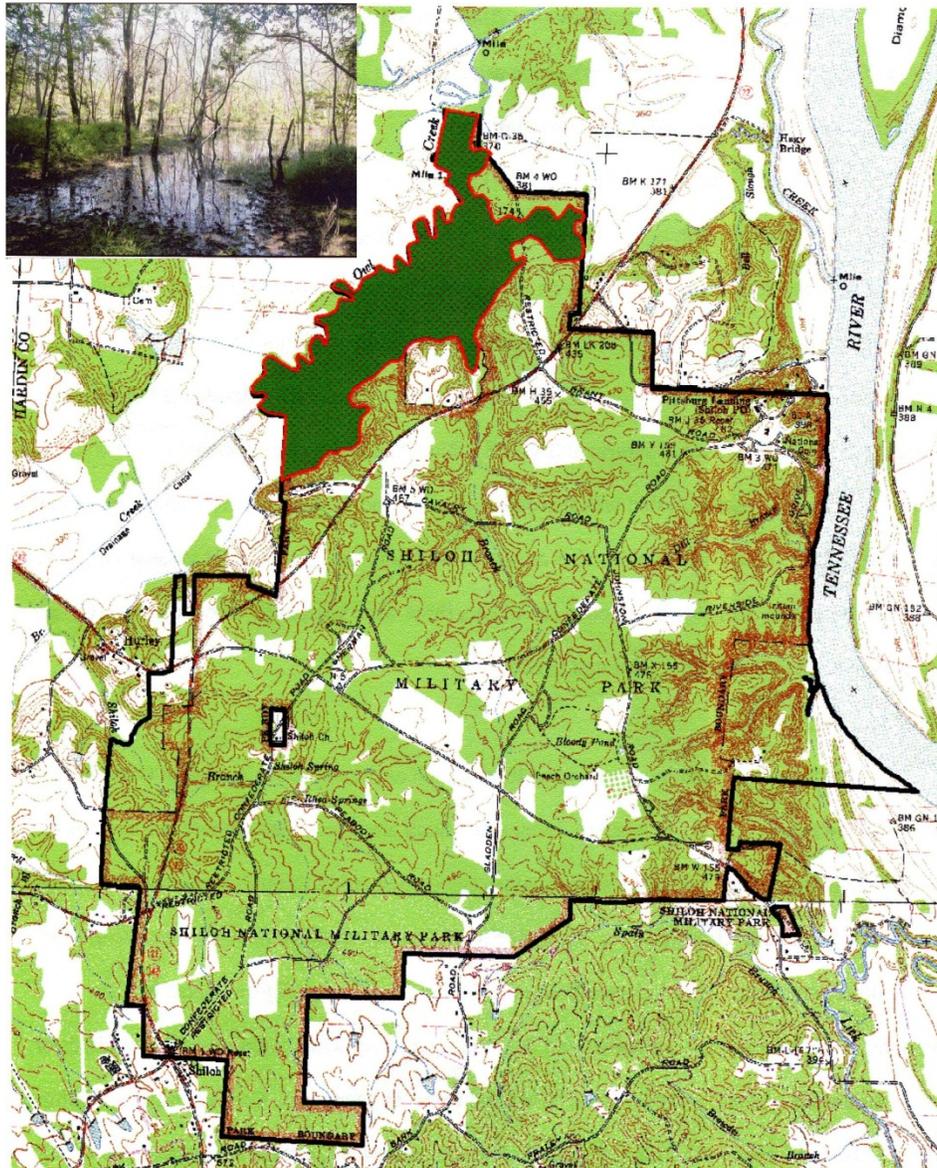
The Owl Creek wetland (or bottomlands) held a significant role in the battle plan of General Albert S. Johnston, the commander of the Confederate Army of the Mississippi. Johnston planned to usurp General U. S. Grant's Union Army of the Tennessee away from Pittsburg Landing and northwest into the flooded bottoms of Owl Creek, where Grant would be forced to surrender. The plan, however, never came to fruition. Though the bottomlands of Owl Creek were not a deciding factor in the outcome of the battle, it remains significant as a unique and diverse ecosystem.

### What is a wetland?

A wetland is commonly defined as an area that is saturated or inundated by surface or groundwater at a frequency and duration significant enough to support a variety of vegetation that is adapted to live in those conditions. Wetlands constitute a variety of landforms, which includes marshes, swamps, bogs, vernal pools, potholes, and wet meadows. Within the 5,500+ acres of the Shiloh Battlefield's boundary, over 376 acres are characterized as wetlands, and the Owl Creek wetland accounts for approximately 315 of those acres ([Roberts and Morgan 2008](#)). Owl Creek itself borders the northwest corner to the northern tip of Shiloh Battlefield, and it floods seasonally.

### Flora and fauna of the Owl Creek Wetland

The majority of the Owl Creek wetland consists of mature deciduous trees such as green ash (*Fraxinus pennsylvanica*), American hornbeam (*Carpinus caroliniana*), sugarberry (*Celtis laevigata*), silver maple (*Acer saccharinum*), and American sycamore (*Platanus occidentalis*), all of which are at least moderately tolerant of flooding. The wetland also has a number of depressions that provide additional water storage, wetland vegetation, aquatic insects, and amphibian breeding habitat ([Roberts and Morgan 2008](#)). The Owl Creek bottomlands are home to numerous aquatic insects (ex. dragonflies, mayflies) and several other species of animals including the red-bellied watersnake (*Nerodia erythrogaster*), marbled salamander (*Ambystoma opacum*), beaver (*Castor canadensis*), mink (*Neovison vison*), yellow-breasted chat (*Icteria virens*), and the great horned owl (*Bubo virginianus*).



The location of the Owl Creek wetland on Shiloh National Military Park (highlighted in green). Top Inset: Flooding in the bottomland hardwoods near Owl Creek. Map and photo from the Inventory and Classification of Wetlands at Shiloh National Military Park.

## Resource Brief: Fire Management

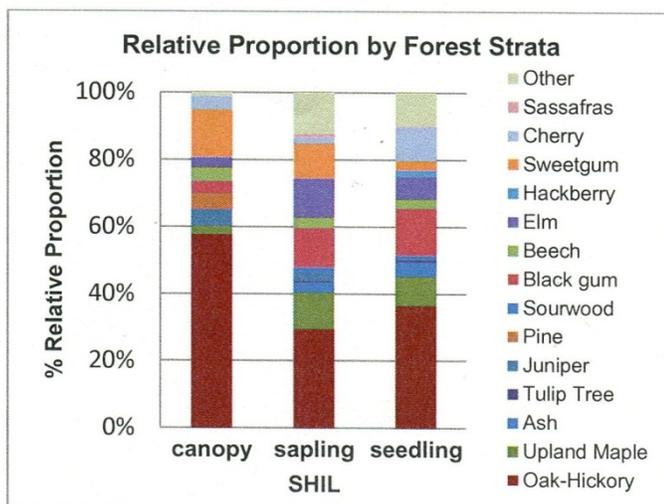
Fire plays an integral role in the health of the various habitats in the southeast. It is a beneficial and cost-effective tool for managing wetlands, grasslands, and various forest types. A controlled burn reduces the build-up of dead woody debris and non-native vegetation, decreases risk of catastrophic wildfire, and encourages oak regeneration ([Van Lear 2000](#)), which provides habitat and forage for several avian and mammalian species. In addition to natural resource health, burning at Shiloh Battlefield is also effective at restoring, preserving, and maintaining historic landscapes (NPS 2004). The battlefield is divided into four burn units totaling over 756 acres. With assistance from the Natchez Trace Fire Management Team, burning has been reintroduced to the park in 2014, and public feedback after the burn has been positive and supportive. Control burning will continue at Shiloh Battlefield on a four-year rotation, and the park's fire management plan will be reevaluated at the end of each rotation.



Control burning at Shiloh near Spain Field. Photo by NPS Staff.

## Resource Brief: Forest Communities

Roughly three-quarters of the 5,000+ acres at Shiloh Battlefield's consists of a variety of forest types. Forest communities are an important and dominant aspect of the landscape in the southeast. Forests provide wildlife habitat, protect soil and water, store carbon, and provide recreational opportunities. Studying the components of a forest provides information on the overall health of the forest ecosystem (CUPN 2013b).



The tree species composition by relative proportion. Photo from Forest Vegetation 2013 Resource Brief.

### Species Composition

There are 22 natural ecological systems associated with forest types within the park boundary, and a total of 740 plant species or lesser taxa have been documented on Shiloh National Military Park ([Nordman 2004](#)). The Cumberland Piedmont Network (CUPN) has established 16 plots to monitor the current and future composition of the forest. Based on plots completed thus far, species of oak (*Quercus sp.*) and hickory (*Carya sp.*) comprise about 60% of the canopy trees, and between 30–37% of the sapling and seedling strata ([CUPN 2013b](#)). Oaks and hickories are the two hardwood species most important to wildlife (and oaks are particularly important for their timber value). The forest strata graph at left shows that Shiloh's oak canopy is dominant, but it suggests that oaks suffer from poor regeneration. Fire suppression, heavy deer browse, and dense shade overstory may be contributing factors ([CUPN 2013b](#)). Other stressors affecting composition, as well as overall forest health, are exotic plants, forest pests, and climate change.

**Exotic Plants**

Approximately 28 of the introduced (non-native) species are considered to be invasive by the Tennessee Exotic Pest Plant Council, and 10 of the 28 are considered to be a severe threat (TNEPPC 2009). Exotic plants, or plants that are not native to a given region or country, disrupt the natural order of a forest ecosystem by displacing native plants. Exotic plants like Chinese Privet (*Ligustrum sinense*) and English ivy (*Hedera helix*) grow in thick monocultures that prevent native plants from germinating. Exotic vines, like *Chinese wisteria* (*Wisteria sinensis*), climb tightly around the stems of woody shrubs and vines, girdling and killing them. Improving forest health focuses on reducing the number of these exotic plants through mechanical removal, pesticide application, and control burns.

**Forest Pests**

Non-native insect pests are a stressor contributing to the decline of the health of eastern deciduous forests. The gypsy moth (*Lymantria dispar*) and the emerald ash borer (*Agrilus planipennis*) are the two species that are a concern to multiple government agencies that govern our forested public lands. Neither has been discovered within the Shiloh Battlefield boundary, but the presence of these forest pests will continue to be monitored annually using pheromone traps.

Wildlife Communities  <a href="#">web</a> 			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Amphibians	Species Composition and Diversity		Accipiter Biological Consultants (2006) reported 30 species of amphibians. Of this total, 22 were detected during their efforts (2003–2005). The remaining eight were reported from previous (pre-2000?) less formal efforts and/or anecdotal observations. Lack of formal documentation for these eight species and length of time since reporting lowers confidence in this total. No trend is shown due to limited availability of monitoring data.
Fish	Species Composition and Diversity		Higgins (1998) documented 50 species at SHIL, many of which were new distribution records. No endemic or rare species were detected, but the author concluded the streams originating within the park are “abundantly diverse and have intact ecosystems.” Confidence in the assessment was ranked low due the fact it is now nearly 20 years old. No trend is shown due to limited availability of monitoring data.
Birds	Species Composition and Diversity		Stedman and Stedman (2006) noted “for a park of moderate size SHIL harbors a diverse array of habitats,” and as a result “its bird list is correspondingly large and diverse.” A total of 187 species were observed during the inventory. An additional 17 species not recorded during the inventory (including the bald eagle, which was recently delisted from the threatened and endangered (T&E) species list) have been reported from the park historically, which brings the park’s species list to 204. The majority of the fields in the park are hay leased to maintain the historic appearance the battlefield, and the lawn is mowed and manicured for visitor access to trails, markers, and monuments. Therefore, the grassland and scrub-shrub-dependent species were low in abundance due to those practices. The number of bird species utilizing wetlands and ponds, however, was unusually high. No trend is shown due to limited availability of monitoring data.

<p><b>Mammals</b></p>	<p>Species Composition and Diversity</p>		<p>Shiloh Battlefield has a good diversity of mammals with 41 total species documented on the park based on inventory studies conducted by the University of Memphis (<a href="#">Kennedy and Jennings 2007</a>, <a href="#">Kennedy 2002</a>, <a href="#">Kennedy 1984</a>). Kennedy and Jennings (<a href="#">2007</a>) concluded that the biodiversity makes the park “an important area for sustaining mammalian biodiversity in the region.” Given that a small portion of these results are based on a survey from 30 years ago, confidence was rated as moderate because some species presence has not been documented for some time.</p>
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## Resource Brief: Amphibians

The southeastern United States is considered a global hotspot of diversity for amphibians, particularly salamanders. Because of their complex life cycle, which includes living in both aquatic and terrestrial environments, and their highly sensitive skin, amphibians are considered to be excellent indicators of ecosystem health.



**This southern red salamander was photographed at SHIL during an inventory conducted in the mid-2000s.**

In the mid-2000s a series of vertebrate inventories were coordinated by the Cumberland Piedmont Network. More than 20 species of frogs, toads, and salamanders were documented on the park during these inventory efforts. This number is comparable to what has been found in many larger parks in the southeast, which is indicative of the diversity and quality of habitats that can be found at SHIL. Some of the more common species occurring on the park include the green frog and Fowler’s Toad, which can be heard calling from the edge of water bodies in the summer. Some of the more common salamanders observed in the park include the spotted salamander, which breeds in temporary pools scattered around the park, and the three-lined salamander which hides under cover along streams and back water swamps during the day, coming out at night to feed on insects and other invertebrates.



**Owl Creek and the bottomland hardwood forests surrounding it provide important habitat for many species of amphibians at SHIL.**

## Resource Brief: Birds

Birding groups have long known that SHIL harbors a diverse array of habitats that support a correspondingly diverse group of birds. An inventory conducted in the mid-2000s documented 187 species. An additional 17 species were reported prior to this inventory, which brings the parks species list to 204 species.

Some of the more productive habitats include several large beaver ponds in the Tennessee River floodplain where wintering waterfowl such as the Mallard, Hooded Merganser, and Green-winged Teal can be found. In the upland forests of the park species such as the Wild Turkey have made a dramatic comeback and can be commonly seen and heard strutting around the park in spring. Yellow-throated Warblers, Summer Tanagers, and Indigo buntings are just some of the other more colorful species that can be commonly observed singing and making their home in the park in spring time.

Full species lists for many wildlife groups including birds can be found at <https://irma.nps.gov/NPSpecies/>



**The Swainson's Warbler is considered of high conservation concern by Partners in Flight. It was documented on SHIL during a recent inventory.**



**The White-eyed Vireo is one of 85 species for which breeding evidence was recorded in a recent inventory.**

## Resource Brief: The Bald Eagle



**First eaglet of 2011 hatching out. Photo by NPS staff.**

The bald eagle is one of the most recognizable birds in the United States as our nation's national bird. In the early 1970s, the bald eagle was on the brink of extinction due to the high content of chemicals and pesticides present in the bird's body. The Endangered Species Act was passed in 1973, and the species was placed on the Threatened and Endangered Species list in 1978. Since then, the eagle has made a remarkable recovery: there were 487 nesting pairs surveyed in 1963, and there were almost 10,000 nesting pairs in 2007. The bald eagle was delisted in August 2007, and ironically it was also the same year that Shiloh Battlefield's first breeding pair of bald eagles became permanent residents within the park's boundaries.

Since then, the park's bald eagle pair has successfully reared eight eaglets in seven years on the battlefield, and began their eighth nesting season in 2015. The eagle nest in Shiloh Battlefield sits in a large pine tree located near the intersection of Hamburg-Savannah and Brown's Landing Road. Due to its adjacency to Shiloh Battlefield's self-guided interpretive tour

route, it has gained the attention and fascination of thousands of locals and visitors across the country. Park and public interest in the health and success of the bald eagle pair led to the installation of a camera in the nest tree in February 2011. This has allowed the park staff and public to monitor all stages of nesting by the eagle pair and their young.

## Dark Night Sky



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Anthropogenic Light	Specific measure		<p>The modeled Anthropogenic Light Ratio (ALR), a measure of light pollution calculated as the ratio of median Anthropogenic Sky Glow to average Natural Sky Luminance, was 2.08, which is considered a poor condition. Trend is neutral based on slow population growth (2%) of the Memphis metropolitan statistical area. The Nashville-Davidson-Murfreesboro-Franklin Metropolitan statistical area grew rapidly (30%) from 2008 to 2013. However, the impact to the park is minimized based on distance from these major metropolitan areas, and therefore the park staff believes a more appropriate rating for Dark Night Skies is moderate concern. Park lands in Alcorn County, MS, lie mostly within the Corinth city limit. With a population of 14,500, Corinth presents visible negative impacts to the darkness of the night sky according to staff observation.</p>

## Resource Brief: Night Sky Resources at Shiloh National Battlefield

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

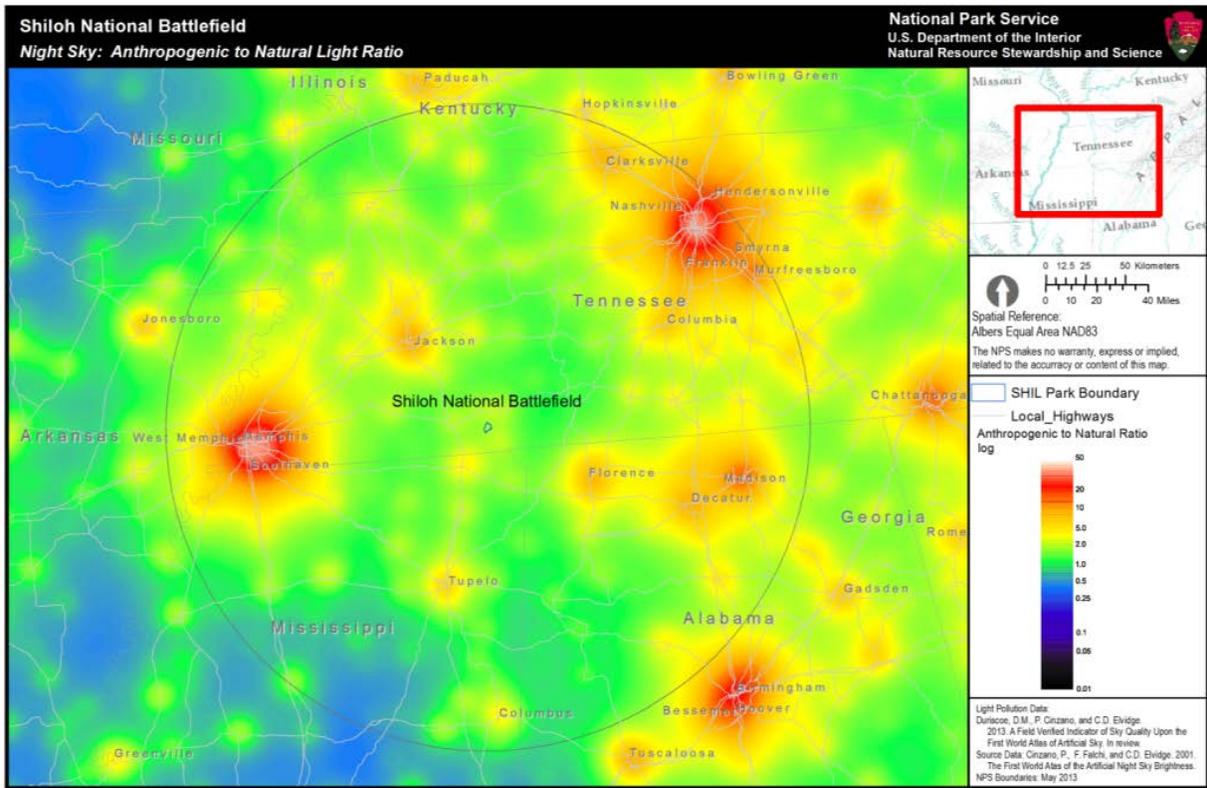
### Condition

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

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

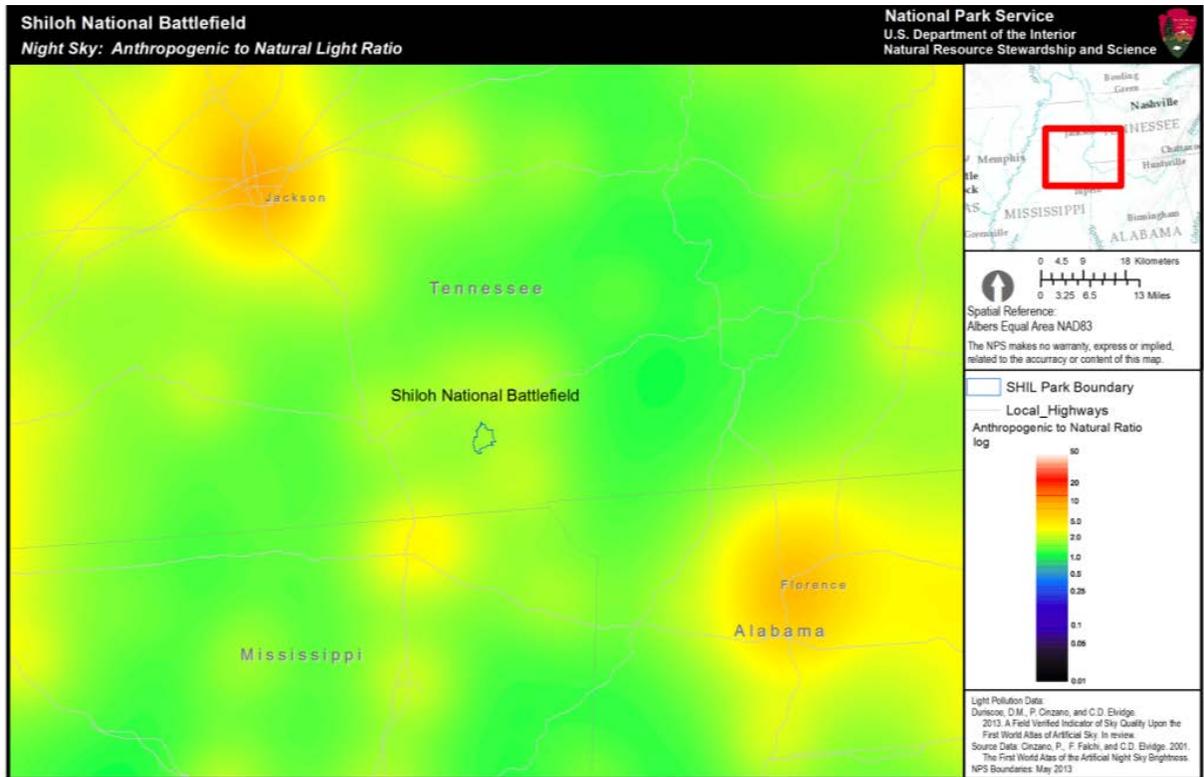
### Impact Criteria

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



NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150120

Regional view of anthropogenic light near Shiloh National Battlefield. The circle around the park represents the distance at which anthropogenic light influences the night sky quality of the park.



NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150120

A local view of anthropogenic light near Shiloh National Battlefield illustrating the park level effects of anthropogenic light on the park.

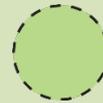
## Acoustic Environment



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<b>Acoustic Impact Level</b>	Mean Acoustic Impact Level		<p>The mean acoustic impact level (L<sub>50</sub> dBA) at Shiloh National Battlefield, calculated as the difference between nationwide models of existing and natural ambient, is 1.5 dBA. This indicates that the acoustic resources are in good condition under non-urban criteria.</p> <p>Due to the rural isolation of the Shiloh and Davis Bridge battlefield properties and their distance from area towns and cities, there is little noise pollution (other than commuter traffic on the nearby highways). The Shiloh Battlefield site has a man-made feature that can be heard clearly, up to a distance of one mile or more in the cold season, and within a half mile in summer, thus affecting the Shiloh Visitor Center, National Cemetery, and adjacent areas year round. Several of the Siege and Battle of Corinth sites are within city limits and dissected by highways and high volume traffic. There is no baseline data at the local scale.</p>

## Adjacent Land Cover and Use



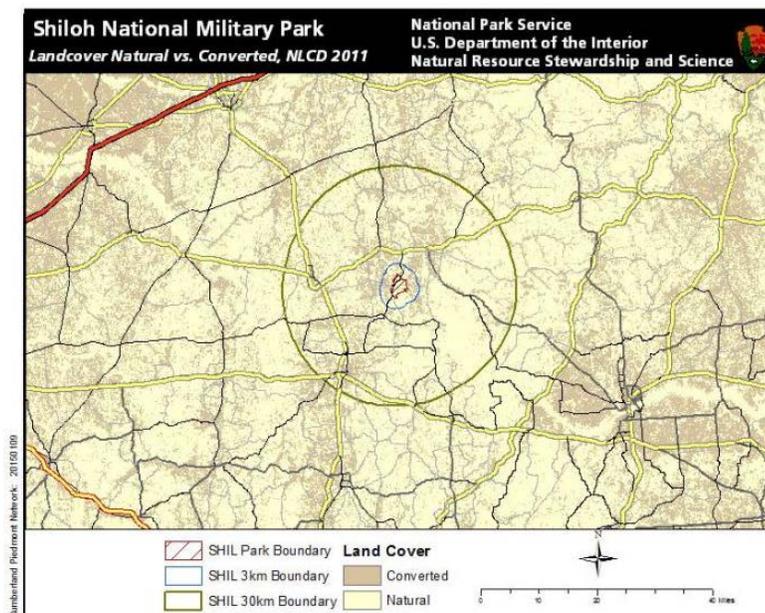
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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<b>Surrounding Land Cover and Use</b>	Forested & Wetland Land use coverage		<p>Based on the National Land Cover Dataset (NLCD 2011), the natural cover of the surrounding areas (forests and wetlands) of Shiloh Battlefield is over 60%, which is considered “good condition.” (With &amp; Crist 1995). The surrounding areas on the northwest boundary of the battlefield bordering Owl Creek and the southeastern boundary along the Tennessee River were historically wetland habitat and bottomland hardwood forest. The majority of those areas have been converted to agricultural use. The majority of the surrounding areas along the northeast, west, and southern boundaries are sparsely-populated residential areas. A bill has been proposed in congress to extend Shiloh National Military Park’s authorized boundary. All future lands acquired by the park will be allowed to succeed back to natural cover.</p>

	Agricultural Land Use		The majority of park lands (exception being those tracts in Corinth located within urban interface of the City of Corinth) reside within a modern pastoral landscape. Considerable agricultural land use exists in and around Shiloh Battlefield, Davis Bridge Battlefield, and lands associated with the park's Corinth Unit that lie from one and a half to three and half miles from the center of the city. Shiloh Battlefield has acquired hundreds of acres of new lands in the past decade, the majority of which were exclusively agricultural. These lands and all future lands acquired by the battlefield will be allowed to succeed back to natural cover.
<b>Human Population Density and Demographics</b>	Human Population		Between 1990 and 2011, human population encompassing the counties where park lands reside increased by 15% and human population density increased 14% in the area surrounding the park (Hardin County, TN). Neighboring population within 25 miles of all park lands (Davis Bridge Battlefield, Shiloh Battlefield, and Siege and Battle of Corinth lands) is approximately 84,000 people. Shiloh Battlefield is presently seeking legislation to extend their authorized boundary. This will extend the buffer zone of the battlefield and lessen negative impacts of local population density increase.

## Resource Brief: Landscape Context of Shiloh National Military Park

Changes in natural land cover provide a general indication of overall landscape condition and offer insight into potential threats and opportunities for conservation ([Monahan et al. 2012](#)). Areas with over 60% of natural land cover intact are considered in “good” condition, while those with less than 30% are considered “of concern” (With & Crist 1995, McIntyre & Hobbs 1999, [Wade et al. 2003](#)). Based on the National Land Cover Dataset (2011), the 30km area surrounding SHIL contains 73% natural cover and is therefore considered “good”. The 3km area around SHIL contains 64% natural cover and so is also good, while the area within the park boundary is 86% natural, which verges on the 90% requirement to be considered “intact”. As can be seen by the map, SHIL lies within the heart of a largely undeveloped area.



Some of the potential threats from nearby development include:

- Air quality issues: Ozone levels in the park warrant moderate concern and surveys in 2009 found ozone injury on 2 species in the park (one of the species had confirmed injury at two sites in the park). Unhealthy levels of ozone can cause respiratory symptoms in visitors and foliar injury to sensitive plants. There are neighboring ozone monitors to help assess this situation, and the Cumberland Piedmont Network is also monitoring ozone levels within the park every seven years.
- Sulfur and nitrogen deposition issues: Wet sulfur and nitrogen deposition at SHIL warrant significant concern, based on NPS Air Resources Division benchmarks. However, although SHIL receives high levels of sulfur and nitrogen deposition, ecosystems in the park are not typical of sulfur-sensitive systems and were rated as having low sensitivity to acidification effects relative to all Inventory & Monitoring parks ([Sullivan et al. 2011a](#); [Sullivan et al. 2011b](#)).

## 2.2. Cultural Resources

Archeological Resources			 <a href="#">web</a> ▶
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<b>Knowledge</b>	Sufficient research is conducted to understand the relationship of the park's archeological resources to the historic contexts for the park.		The park has nine known archeological sites. The extant archeological resources preserved within these sites, beginning with prehistoric resources (e.g. Shiloh Indian Mounds National Historic Landmark, Mississippian ≈ 950–1350 AD) and continuing through the prominent Civil War period are documented to be in good condition on the Shiloh Battlefield Unit. Specific prehistory data for the park's Corinth Battlefield Unit in Mississippi is relatively unknown, but the Civil War archeological resources are deemed in good condition based on recent field survey and data assessment. Numerous archeological investigations have been conducted on park lands, dating back to the late 19th century, with a significantly increased level of investigation conducted in the past quarter-century. All of this study supports relevant understanding of the historic contexts of the park.
	Scope of archeological resources in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		Archeological resources are a fundamental resource for the park and the scope is understood.
	Percentage of archeology baseline documents with current and complete information.		All federal lands associated with the Shiloh Battlefield Unit have been surveyed for archeological assessment.
	Percentage of sites with known date ranges associated with a research theme.		All identified sites have known date ranges associated with a research theme.
<b>Inventory</b>	Percentage of archeological resources with complete, accurate, and reliable data in the Archeological Sites Management Information System (ASMIS).		Four of the nine known park archeological sites possess complete, accurate, and reliable documentation. These four sites—Shiloh battlefield, Corinth battlefield, Corinth Contraband Camp, and Shiloh Indian Mounds—preserve more than 90% of the known archeological sites managed by the park. Of the remaining smaller sites, one is administratively listed and four more are cited as unevaluated.

<b>Documentation</b>	Percentage of known sites with adequate National Register documentation.		Four known sites present on the park possess adequate National Register documentation (e.g. Shiloh Battlefield District; Siege and Battle of Corinth National Historic Landmark, Corinth Contraband Camp, and Shiloh Indian Mounds National Historic Landmark). These four large sites alone account for more than 90% of the known archeology sites present in the park.
	Percentage of archeological materials cleaned, conserved, studied, cataloged, and properly stored.		69.03% Total archeological collection = 245,396 Cataloged = 169,395
<b>Certified Condition</b>	Percentage of Maintained Archeological Resources in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.		Seven of the nine sites rated in good condition in 2014. One site listed fair; and one cited status unknown. Inspection schedule is every five years for seven sites and undetermined for two sites.

## Resource Brief: Mound Archeology Project

Shiloh Indian Mounds: Designated a national historic landmark in 1989, the prehistoric Mississippian village and temple mounds are archeological evidence of a chiefdom that thrived on the banks of the Tennessee River 1,000 years ago. One of the finest effigy pipe artifacts in existence was unearthed here. The landmark is unique on account of its pristine condition, having been protected by establishment of the national military park in 1894. It remains the only location in the world with an intact Mississippian village. The physical remains of more than seven dozen collapsed prehistoric wattle and daub houses are clearly visible within the site. Along with six ceremonial or temple mounds, evidence of a defensive palisade, and a burial mound, the site remains the finest representative resource in the nation to interpret and preserve the remnants of a prehistoric culture long deceased.

Located on the historic Shiloh battlefield at Shiloh National Military Park, the Shiloh Indian Mounds National Historic Landmark preserves the central site of an important Native American village dating back more than 800 years.

Dating from the Mississippian era, the Shiloh Indian Mounds complex consists of six rectangular platform mounds and an oval burial mound where individuals of high status were laid to rest. The town and ceremonial site was the centerpiece of what archeologists call the Shiloh Chiefdom, although it is not known what the people who occupied this site once called themselves. In addition to the Shiloh Indian Mounds, the chiefdom included at least six smaller sites with one or two mounds each.

The Shiloh site is unique for several reasons. First, it has never been plowed and as a result the mounds retain much of their original pyramidal shapes. Second, the site has long been preserved as part of Shiloh National Military Park and as a result the cultural deposits and artifacts there have also been preserved largely intact and protected from looting. Third, the site is one of few in the United States where surface remains of prehistoric houses can still be seen.

In addition to the large mounds, a number of low rises can be seen dotting the grounds of the site. Archeologists have determined that these were formed by debris from houses that stood in the village more than 800 years ago. Some of these rises appear as low mounds while others look like rings of earth. The rings were formed by the collapsed walls of the Indian houses.

In addition, the site was once surrounded by a strong fortification made of vertical posts into which smaller branches were weaved. The entire palisade was then coated with clay or “daub.” The trace of this wall can still be seen today as well, a visible feature that is relatively rare at such sites.

For additional information see the National Parks Conservation Association’s [State of the Parks report on Shiloh National Military Park](#) and the [Shiloh Indian Mounds webpage](#) on ExploreSouthernHistory.com.

## Cultural Anthropology



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<b>Knowledge</b>	Sufficient research is conducted to understand the relationship of the park's ethnographic resources to the historic context(s) for the park.		Considerable historical research exists to understand the impact of the Civil War on local people and communities, but more is needed. An Ethnographic Overview and Assessment is needed to address ethnographic links to the Chickasaw Nation and other tribes in relation to park lands. This should also include research and assessment living local communities and their links to the park with a specific focus on: 1) the human experiences directly related to the siege and battle of Corinth, habitation of the Corinth Contraband Camp, development of the Corinth National Cemetery, and local heritage preservation efforts in Corinth; and 2) Shiloh United Methodist Church and the active role which the church and surrounding Shiloh community have played in respect to preservation of the history of Shiloh.
<b>Documentation</b>	Research results are disseminated to park managers, planners, interpreters, and other NPS specialists and incorporated into appropriate park planning documents.		Research results are actively disseminated among the park staff, with copies of the results on file in park libraries. In addition, reports are disseminated to the public via the park and other NPS websites. In addition, research results guide management decisions in regards to land acquisition, site preservation, resource management, and administration; and are effectively incorporated by the park's interpretive staff to develop site bulletins, wayside exhibits, and interpretive programs.

### Resource Brief: CCC Camp – WWI Black Veterans

Shiloh had special significance for African American veterans, as the Civil War battlefield played a major role in the Union's eventual victory over the Confederacy. Shiloh and other national parks were some of the chief beneficiaries of the New Deal's job creation programs. The first of the two CCC camps at Shiloh was Camp MP-3 (Camp Young), established on July 15, 1933, while the second, Tennessee Camp MP-7 (Camp Corinth) was also established on June 14, 1934.

For the next six years, these two camps, under the direction of white supervisors were staffed and inhabited by nearly 400 African-American men, mostly World War I veterans, who served as laborers on numerous facility improvement and resource preservation projects across the park. These included rehabilitation and erosion control of park streams and historic fields, and the entire landscaping of Tennessee Highway 22, which linked Corinth to Shiloh battlefield as a Federal Road managed by the park.

The camps provided lodging, meals, and educational opportunities for the enrollees. The laborers used their existing talents and learned valuable knowledge, skills, and abilities in assisting the National Park Service to further develop and maintain the park. They attended education classes at camp facilities and were taught vocational skills to assist them with employment opportunities outside the CCC program. In addition, a full range of recreational activities formed a part of their weekly schedule.

The physical evidence of the excellent work and care these men performed for public benefit is still readily visible today as one drives the State Highway linking Shiloh to Corinth; looks across several of the stable historic fields once ripped open by unchecked soil erosion only to be restored and resurfaced by the CCC; or as one meanders across the numerous battlefield streams, stabilized by the sweat and toil of Shiloh's CCC enrollees to rehabilitate thousands of linear feet of eroding creek banks and construction of hundreds of vital water bars to assist in channeling water to maintain and preserve crucial battlefield topography.

## Resource Brief: Contraband Camp

As Federal forces occupied major portions of the South, enslaved people escaped from farms and plantations and fled to safety behind Union lines. Once President Abraham Lincoln’s Preliminary Emancipation Proclamation was issued in September 1862, the number of freedom seekers increased considerably in Union-occupied Corinth.



The Corinth Contraband Camp was established by Union General Grenville M. Dodge to accommodate these refugees. The camp featured numerous homes, a church, school, and hospital. The freedmen cultivated and sold cotton and vegetables in a progressive cooperative farm program. By May 1863, the camp was making a clear profit of \$4,000 to \$5,000 from its enterprises. By August, over 1,000 African American children and adults gained the ability to read through the efforts of various benevolent organizations. Although the camp had a modest beginning, it became a model camp and allowed for approximately 6,000 ex-slaves to establish their own individual identities.

Once the Emancipation Proclamation was implemented, nearly 2,000 of the newly freed men at the Corinth Contraband Camp had their first opportunity to protect their way of life and made up a new regiment in the Union army. Since most of the men came from Alabama, the unit was named the 1st Alabama Infantry Regiment of African Descent, later re-designated the 55th United States Colored Troops.

In December 1863, the camp was moved to Memphis and the freedmen resided in a more traditional refugee facility for the remainder of the war. The Corinth Contraband Camp was the first step on the road to freedom and the struggle for equality for thousands of former slaves.

Today a portion of the historic Corinth Contraband Camp is preserved to commemorate those who began their journey to freedom there in 1862–1863. This land now hosts a quarter mile walkway that exhibits six life-size bronze sculptures depicting the men, women, and children who inhabited the camp.

For more information see the park’s [Corinth Contraband Camp webpage](#).

### Cultural Landscapes



[web](#) ▶

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research exists to understand the relationship of the park’s cultural landscapes to the historic context(s) for the park.		No formal, specifically themed, cultural landscape inventories (CLI) exist for Shiloh or Corinth. A draft CLI inventory sheet exists for the Shiloh National Cemetery. Considerable documentation exists to understand what landscapes exist and the relationship of these to the historic contexts of the park. The park needs CLIs and CLR for the whole park.

	Cultural landscapes are identified and evaluated using appropriate historical contexts.		Yes. Staff uses a considerable volume of documentation, published works, studies, maps, photos, etc. to guide preservation of the cultural landscape of the park. There are no CLRs for the park sites. The primary park sites are extremely old, with documentation for Civil War landscapes dating from the Civil War itself. Prehistoric landscape (e.g. specifically Shiloh Indian Mounds NHL) earliest documentation dates to 1867 with substantially increased documentation of this landscape being performed 1905 to the present; with considerable documentation being conducted by SEAC and other authorities since the mid-1990s.
	Scope of cultural landscapes in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		The scope of cultural landscapes is understood and determination has been made to include the following as fundamental resources: Shiloh battlefield (e.g. includes the post-1894 commemorative layer), Shiloh National Cemetery, Shiloh Indian Mounds National Historic Landmark, Siege and Battle of Corinth National Historic Landmark—expanded by Congress to include all lands associated with the Corinth Battlefield Unit, which includes relevant landscapes like the Corinth Contraband Camp, etc. identified within the Corinth Special Resources Study (2003) and Shiloh Boundary Adjustment Study (2004).
	Percentage of cultural landscape baseline documents with current and complete information.		Beyond the <a href="#">Shiloh Historic Base Map Report of 1973</a> , completed by NPS Historian Edwin Cole Bearss, Shiloh does not possess a number of baseline NPS documents necessary to manage the numerous landscapes preserved on the park. No thorough inventory or specific landscape resource studies have been completed, although the park uses a wealth of park records and published documentation to base management decisions affecting cultural landscapes. A contract Historic Resource Study is currently in development.
<b>Inventory</b>	Percentage of landscapes eligible for the National Register in the Cultural Landscapes Inventory (CLI) with certified complete, accurate, and reliable data.		100% complete. Civil War landscape for Shiloh battlefield is documented and listed on the National Register as a district. The landscape comprising the Siege and Battle of Corinth and Shiloh Indian Mounds are registered as National Historic Landmarks. This documentation and additional studies, publications and resources frame park management at this time. No specific CLI exists for SHIL.
<b>Documentation</b>	Percentage of cultural landscapes with adequate National Register documentation.		100% complete. Considerable documentation exists to assist management steward identified landscapes. The landscapes identified on the register are: Shiloh Battlefield (NR as a district and includes Shiloh National Cemetery), Siege and Battle of Corinth (NHL) and Shiloh Indian Mounds (NHL). However, the question does exist concerning any need to update the current register listings for SHIL.

## Resource Brief: Shiloh NMP Battlefield Landscape

Established in 1894 so that the armies of the southwest, which served in the Civil War, would have the history of one of their memorable battles preserved on the ground where they fought, Shiloh National Military Park commemorates the scene of one of the momentous killing fields of the war, and the largest battle of the 1862–63 campaign for possession of the railroads of the western Confederacy and military control of the lower Mississippi River. In the early spring of 1862, National forces under Maj. Gen. Ulysses S. Grant pressed the campaign for control of the Mississippi River following quick decisive victories at Forts Henry and Donelson in northern Tennessee. In March, Grant's victorious army ascended the Tennessee River, establishing camp on the west side of the river at Pittsburg Landing in southwest Tennessee. The Union camp extended two miles inland, encompassing a wilderness log church named Shiloh. Grant waited the arrival of the Union Army of the Ohio under Maj. Gen. Don Carlos Buell and made preparations to attack the strategic railroad junction at Corinth, Mississippi, twenty-two miles to the southwest. However, the western Confederate army under Gen. Albert Sidney Johnston, marching north from Corinth (April 3–5), surprised and engaged Grant's forces at Camp Shiloh on April 6. In the two days of bitter fighting, both United States and Confederate armies suffered heavy casualties—sustaining a combined total of 23,746 soldiers listed killed, wounded, or missing out of the 109,784 men engaged. Among the dead was the Confederate commander, Albert Sidney Johnston, who bled to death from a bullet wound inflicted on the first day of battle. Johnston holds the distinction of being the highest ranking American military officer killed in action in the nation's long history. Reinforced by the arrival of a sizable portion of Buell's army after nightfall, U.S. Grant launched a massive counterattack the following morning, April 7. Although the outnumbered Confederates, led by their new commander, Gen. P.G.T. Beauregard, made a determined stand, the southern forces were compelled to retire from the field and fall back to their important base at Corinth. The awful carnage experienced by the combatants at Shiloh shocked the America people, bringing the horrors of war home to both the North and the South. The ferocity of the fighting experienced on "Shiloh hill" forecast an increasingly bloody and protracted war.

Today, however, Shiloh hill is a "place of peace" as its biblical Hebrew name implies. The battlefield terrain consists of small- to medium-sized agricultural fields, rugged ravines, marshy creeks, and natural springs, surmounted by natural vegetation consisting of an eastern deciduous open forest, made up predominantly by numerous varieties of oak and hickory trees. This pastoral character of the landscape provides a tranquil and strikingly beautiful memorial setting, permitting visitors with an opportunity to slip easily back into the past, making Shiloh, in the opinion of many historians, one of the best preserved of the nation's Civil War battlefields. One important development rising from the long-term preservation and stewardship of this nationally-significant Civil War site, has been the creation—or to state the case more precisely—the preservation of an oasis of biological diversity within park boundaries. This diversity is reflected by an abundance of terrestrial and aquatic animal and plant species representing natural population densities for numerous species not experienced elsewhere in the surrounding region. The small island of natural history preserved by the park provides visitors with an outstanding example on the crucial role the National Park System continues to occupy in preserving the vanishing rural American landscape and its associated native wildlife.

Currently, the National Park Service stewards nearly 5,100 of the more than 6,000 acres authorized by legislation for inclusion in the park. Managers administer a progressive land protection plan to coordinate further acquisition of the remaining historic properties located outside national park boundaries held under private ownership.



**From Shiloh NMP 150th anniversary celebration.**

Occupying equal status in national significance alongside the more famous Civil War story preserved within the boundaries of the park is a much older human prehistory commemorated and protected by the Shiloh Indian Mounds National Historic Landmark (established 1989). This extensive prehistoric village and temple mound complex, inhabited by indigenous American Indians from 900 to 1300 A.D., is the best-preserved Mississippian town site in the Tennessee River Valley. The site resides on a portion of the Shiloh battlefield, overlooking the Tennessee River, which comprises the park's eastern boundary. Once protected by a defensive wood palisade, the landmark is unique for the pristine state of preservation exhibited among the earthen remains of more than 70 prehistoric houses and six temple mounds located in this forty-five acre prehistoric village.

The diversity of history preserved on the park is interpreted and commemorated by 160 monuments, more than 200 Civil War cannon, roughly 600 iron interpretive tablets, and numerous wayside exhibits. With its compelling stories and pastoral setting, a journey

through Shiloh offers the provocative opportunity to experience cultural remnants of prehistoric human activity and investigate a troubled period in our national history, as America stood upon a momentous crossroads and waged bitter civil war over issues of civil liberty and the definition of freedom. It is a place where many who tramp its fields and woods in the calmness of a spring day claim they can still hear the guns roar.

## Resource Brief: War Department Markers, Historical Markers, Shiloh National Cemetery

More than 800 monuments and markers, 4,000 headstones, and 227 cannons are sobering reminders of the historic events that occurred on the lands within Shiloh National Military Park. Battlefield monuments have been repaired and replaced; since 2003, more than 100 troop position markers, missing from the park for several decades due to theft or vandalism, have been recast and erected at their proper locations on the Shiloh battlefield. Also, all historic cast-iron markers (more than 650 of them) are repainted on a three-year cyclic program. Shiloh acquired 47 new ductile iron cannon carriages to begin the task of eventually replacing all of the nearly 200 cast iron carriages, which are more than a century old and have fallen into disrepair. At an average (and ever-increasing) cost of \$14,500 per new carriage, this is a sizable financial undertaking that will take many years to accomplish. In addition, all aerial electrical transmission lines located on the battlefield were removed and returned to underground transmission, enhancing the scenic and historical view shed in the park. Preservation maintenance projects for the National Cemetery have recently straightened and aligned more than 2,000 headstones and repaired sections of the stone wall and all brick walkways.



Historic colored postcard image of Shiloh National Cemetery.

### Historic Structures



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p><b>Knowledge</b></p>	<p>Sufficient research is conducted to understand the relationship of the park's historic structures to the historic context(s) for the park.</p>		<p>A total of 228 structures are documented on the park's List of Classified Structures. Of this large total, 217 of the structures are cited as being in good condition, which is remarkable given the vast majority consist of the commemorative monuments, markers, and headstones comprising the historic and commemorative landscape of Shiloh battlefield, the overwhelming majority of which are more than a century old, some dating prior to the Civil War and the park's prehistory (e.g. Shiloh Indian Mounds and Village), and thus all are subject to the daily impact and adverse effect of weather and climate. Park archival files and study library contain substantial administrative record of the history and stewardship of these diverse structural cultural features, which include the Indian mounds, house sites, the William Manse George cabin, Shiloh's historic roads, and the park's New Deal administrative buildings.</p>

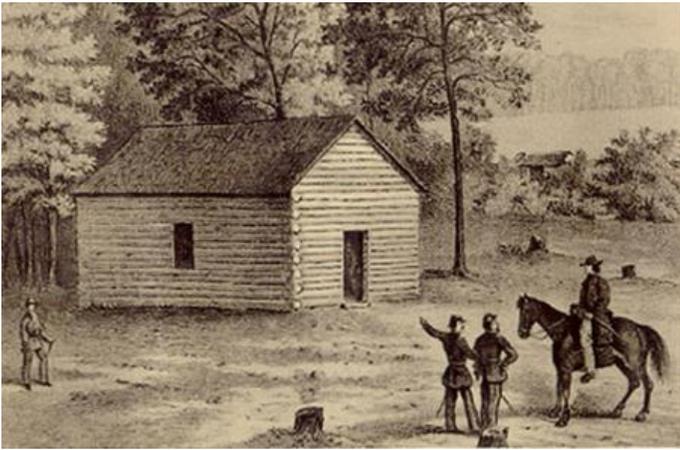
	Historic Structures are identified and evaluated using historical contexts.		All known structures (228) determined eligible to be listed on the park's List of Classified Structures on Shiloh battlefield have been evaluated (100%). The list has been updated in the last five years. No structures for the Corinth Battlefield Unit are currently listed.
	Percentage of historic structure baseline documents with current and complete information.		0% No historic structure report has been produced for any historic structure in the park. All of the park historic structures need to be recorded, documented, and evaluated. The park's historic structures should be professionally evaluated and documented especially the Corinth and CCC/WPA structures.
<b>Documentation</b>	Percentage of historic structures with adequate National Register documentation.		All structures present on the park in 1974 are cited in the original National Register documentation. This documentation has been updated for structures eligible and added to the List of Classified Structures recently (e.g. New Deal era buildings like the Shiloh Visitor Center, bathroom, bookstore, government residences, etc.).
<b>Certified Condition</b>	Percentage of historic structures certified as complete, accurate, and reliable in the List of Classified Structures (LCS) in good condition.		Records cite 95% (217) of the 228 historic structures listed for Shiloh National Military Park were in good condition as of 2014.

## Resource Brief: Victim of the Battle – Shiloh Meeting House

The battlefield is named for a simple log church, known as the Shiloh Meeting House, which was located here in 1862. The original one room log structure was all but destroyed by the battle, which led to its complete demolition by United States troops who used salvageable timbers for bridge construction over nearby Shiloh Branch and its tributaries. Two subsequent churches have marked the location, the most recent stone and brick structure dating to initial construction in 1929.

The four acres on which the church and its congregation cemetery reside are privately owned by the Shiloh United Methodist Church. Most recently, the church congregation, using architectural blueprints provided by the NPS in the 1960s, constructed a replica of the original log church on their land. This facility is open daily to park visitors.

The park has a long and engaged relationship with the church congregation. For years a community 12-grade school was maintained on church land. This facility closed in the late 1950s, with the land being sold to the park and the school building demolished. The congregation partners with the park in numerous public activities and special events and graciously opens its grounds (unrestricted) to visitor use and enjoyment, permitting the park to locate commemorative markers, monuments, and wayside exhibits on church land. Park staff assists the church in maintaining its landscape with technical assistance regarding structures, debris removal, and interpretation, as well as with protection and security by park law enforcement staff that patrols the battlefield daily.



Period eyewitness illustration of the original Shiloh Meeting House.



Reconstructed log church residing on the historic Shiloh United Methodist Church property.

## Resource Brief: War Cabin – Survived the Assault in 1862

The only remaining building from the period of battle, the William Manse George Cabin is a prime interpretive resource for the park. This cabin, at the time of the battle, was located in Perry Field, near the main entrance to Shiloh Battlefield on Tennessee Highway 22 more than a mile north of its present location on the northern edge of Sarah Bell Field. The cabin was relocated in the immediate aftermath of the April 1862 battle, to replace the George cabin destroyed by artillery fire. A mere ruin in 1895, with collapsed roof and crumbling walls, the cabin has undergone several restorations since then. The most recent preservation and restoration work, completed in 2004, included installation of a new mud and stick chimney and roof.

Although, it is closed to daily entry by park visitors, the park staff continues to use the cabin to support interpretive programs on civilian life, particularly in regards to women and children, subsistence farming, and impacts the war had on the surrounding rural community. A battle survivor, the cabin permits visitors to appreciation and understand its important place to represent the more than seventy such structures that resided on the battlefield in April 1862, only to fall victim to devastation wrought on the landscape in two days of brutal combat.



Lone surviving witness cabin preserved on Shiloh battlefield.

### History



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the national significance and historical contexts for the park.		Yes. Government documentation began in 1862 for site significance in relation to the Civil War, and since establishment of the park both the War Department and now the NPS have consistently researched the history of the park, its resources, and values to understand its significance. This continues with recent SRSs and Boundary Adjustment Studies SHIL was included in (Corinth and Vicksburg Campaign Trail Feasibility Study; along with the current studies being completed: SHIL HRS and SHIL Administrative History).

	Sufficient research is conducted to establish the reasons for park establishment and a history of the NPS management of the site.		Yes. Government documentation began in 1862 for site significance in relation to the Civil War, and since establishment of the park both the War Dept. and now the NPS have consistently researched the history of the park, its resources, and values to understand its significance. This continues with recent Special Resource Studies and Boundary Adjustment Studies SHIL was included in (Corinth and Vicksburg Campaign Trail Feasibility Study; along with the current studies being completed: Shiloh Historic Resource Study and Administrative History). Also, a new Administrative History is being prepared that will update park creation and subsequent administration and stewardship through 2010. Other authorities have studied site creation and history through published dissertations, theses, and other works.
	Percentage of history baseline documents with current and complete information.		90%. In addition to a sizable onsite history archive documenting the establishment, development, and preservation of the park since 1894, the park has numerous history baseline documents, including the first Shiloh Administrative History (1954), Shiloh Historic Base Map Report (1973), Shiloh Indian Mounds National Historic Landmark Nomination (1989), Siege and Battle of Corinth National Historic Landmark Nomination (1993), and the Corinth Special Resource Study (2004). Currently, two additional baseline documents are under development, a Shiloh Historic Resource Study and updated Shiloh Administrative History, both of which should be complete by end of 2016.
	Research supports cultural resource management.		Existing documentation since the park was established in 1894 guides planning and decisions involving all park resources. Recent examples are the Corinth Special Resource Study and Corinth Boundary Adjustment Study used to plan and develop the preservation alternatives required to establish and maintain the Corinth Battlefield Unit.
<b>Inventory</b>	Percentage of cultural resources listed in appropriate Service-wide inventories, including the National Register.		90%. All known cultural resources present with the Shiloh Battlefield Unit are inventoried and listed (NR, LCS, etc.). Same exists for Corinth in regards to the National Register, the major exception being the eligible historic structures within the Corinth Battlefield Unit are not documented on the park's List of Classified Structures.
	Research data are accessioned as part of the park's museum collection.		The park lacks an archival survey with a Federal Records management component.
<b>Documentation</b>	Percentage of historic properties with adequate National Register documentation.		95%. Shiloh documentation is up to date, with qualifying structures cited on the park's List of Classified Structures and the battlefield listed on the National Register as a historic district since 1974. Park properties residing within the Corinth Battlefield Unit received initial documentation through its National Historic Landmark/National Register documentation. However, the park's National Register documentation needs to be updated.

## Resource Brief: Government Documentation of Shiloh NMP

The written documentation for Shiloh National Military Park begins in 1862 with reports, correspondence, and all manner of documents prepared by participants and eyewitnesses of the battle. This documentation carries forward through to the establishment of Shiloh National Cemetery in 1866, and all related documentation to record exhumations and burials in the National Cemetery. From this point forward, the administrative history of the park begins, building on the Civil War records and National Cemetery records, to encompass the initial development of the park, dating from the 1890s to the present, covering both the War Department as well as the Department of the Interior (e.g. National Park Service) stewardship of the park.



Government documentation recording the history of the park exists in several locations, starting with the park itself, where more than 200,000 documents reside, to National Archive and Records Administration collections in Atlanta, Georgia, and Washington DC; as well as the Southeast Archeological Center in Tallahassee, Florida. Civil War documentation relevant to Shiloh exists at numerous archived locations around the United States, some of which are managed by the Federal Government like the United States Army Military History Center in Carlisle, Pennsylvania.

The park collection is stored in several locations, the museum collection storage facility, the park library in the Shiloh Battlefield Visitor Center, the park Administration Building, and the Corinth Civil War Interpretive Center.

Original Exhumation and Burial Ledgers for Shiloh National Cemetery archived in the park collection.

### Museum Collections



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Scope of museum collection in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		Yes. The park's museum collections are a fundamental resource for the park. The Scope of Collection Statement was reviewed updated in FY 2011.
	Percentage of museum collection baseline documents with current and complete information.		88.88%. Majority of baseline documents have been prepared within the last ten years. The park requires updated Housekeeping and Integrated Pest Management plans specific to collections. The park's Museum Collection Management Plan recommends the park contract a condition survey for paper, photographs, and archives in park collections by a qualified paper conservator, stating that some of the most significant and fragile holdings in the collection are paper based materials. A number of conservation treatments have been performed for many objects in the park collection since 1989, the most recent involving conservation for an iconic

		collection object—the only original Civil War period Sibley Tent preserved within the western hemisphere. This unique canvas object received conservation treatment in 2012 prior to its loan to the Smithsonian for a Civil War Sesquicentennial exhibit.
	Affected Native Americans are consulted concerning items of cultural affiliation.	 The park consults with the Chickasaw Nation of Oklahoma in regards to prehistoric cultural items associated with the Shiloh Indian Mounds National Historic Landmark and has a current Memorandum of Understanding with the Chickasaw Nation governing all archeological investigation of the Mounds site.
	Museum curator is included in permit review and informed about park resource projects that may affect collections.	 Park museum collections are managed by the Chief of Interpretation and Resource Management, who performs all permit review in regards to all projects that hold potential to affect collection management. Two additional park personnel have collateral duty assignments in managing the park’s collection.
<b>Inventory</b>	Archival and manuscript collections are surveyed and described in the Interior Collections Management System (ICMS) and finding aids are produced.	 No. The park lacks a park-wide archival and Federal records management survey, but has a digital data catalogue to use as its current electronic finding aid for the archived paper collection.
	Percentage of existing collection that is accessioned and cataloged.	 73.24%. More than 99% of the backlog items are located at the Southeast Archeological Center in Florida. This backlog is comprised of objects collected in archeological investigations conducted since 2000 at Shiloh Indian Mounds National Historic Landmark and in Shiloh battlefield investigations, including mitigation investigations associated with recent Federal Highway road construction. The backlog at the Archeological Center has decreased substantially over the past five years, as the staff continues to catalog the great quantity of material collected. Records document that more than one-third of the park collection is out on loan, the majority of which is material housed at the Southeast Archeological Center.
	Scope of Collection is consistently implemented; items or objects are researched to determine their appropriateness for inclusion in the museum/archive collection.	 The park’s Museum Collection Management Plan was updated in 2010, with determinations of appropriateness for inclusion cited. The park collections held at the park and the Southeast Archeological Center, totaling 430,803 items, are in good condition. Scope of Collections Statement is consistently implemented.
<b>Documentation</b>	Accession and deaccession files are complete with all appropriate signatures.	 Roughly 98% of the acquired collection has been accessioned with appropriate signatures on file. Although deaccessions are rare for the park, these undertakings have been documented with appropriate signatures on file.

	Percentage of cataloged records with completed descriptive fields (beyond required fields).		All items catalogued in the collection have complete descriptive fields. A total of 73.24% of the collection is cataloged, leaving 115,262 items requiring cataloguing. The most serious backlog of incomplete cataloguing exists off the park at the Southeast Archeological Center and at various universities storing biology specimens collected in recent scientific research and inventory projects.
<b>Certified Condition</b>	Percentage of museum collection storage facilities in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.		Overall condition of the collection, based on survey and improvements to storage is deemed good, with 95% (164 of 172) applicable Museum Collection Standards met; and recommendations are noted in the park's collection management plan for improvement of condition issues, citing need for a collections storage plan and a storage facility housekeeping plan.

## Resource Brief: 76th Ohio Infantry Regimental Adjutant's Field Desk

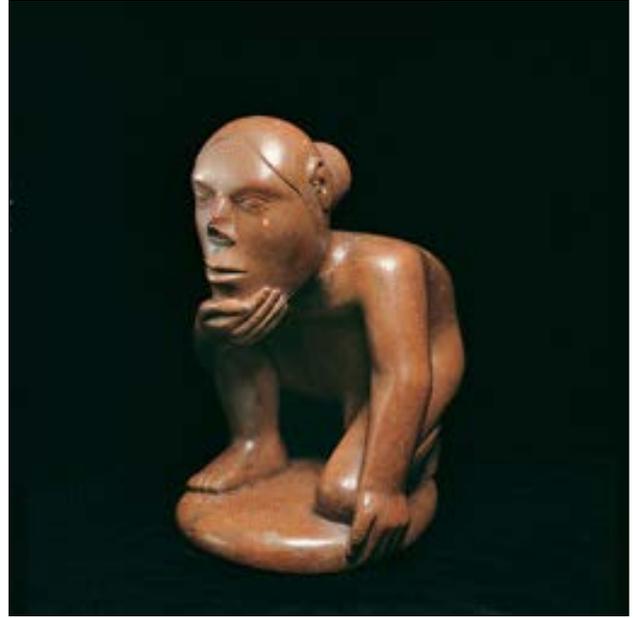
Recently donated to the park, this unique item is on display at the Corinth Civil War Interpretive Center. After the Civil War, Lieutenant Charles Dana Miller retrieved the field desk he had used from April 1862–March 1864 as regimental adjutant for the 76th Ohio, experiencing service at both Shiloh and Corinth during the war. A number of late war documents were still located inside the field desk and were donated to the park along with the desk. A skilled wood artisan, Miller carved a commemorative history of his regiment's war experience onto the desk's exterior panels. The front of the desk folds down to provide a work area, exposing compartments and drawers for document storage. This unique desk is one of the finest examples of folk art to survive the American Civil War.



**76th Ohio Regimental Adjutant's Field Desk.**

## Resource Brief: Effigy Pipe, Little Man of Shiloh

The first known archeological excavation at Shiloh took place in 1899 when amateur archeologist Cornelius Cadle, who served as chairman of the Shiloh National Military Park Battlefield Commission, dug a trench into “Mound C.” This particular mound proved to be a Mississippian period burial mound. Within the mound, Cadle discovered the site’s most famous artifact, a large stone pipe carved in the shape of a kneeling man. Now on display in the Tennessee River Museum in Savannah, Tennessee, this effigy pipe is made of the same distinctive red stone and is carved in the same style as a number of human statuettes from the Cahokia chiefdom, located in Illinois near St. Louis. The pipe would have set in front of the user, with a long wooden mouthpiece coming out of the backside so it can be smoked while the user is sitting or squatting. See the park’s [Shiloh Indian Mounds History website](#) for more information.



The “Little Man of Shiloh” Effigy Pipe.

## Resource Brief: Soldier Flag

A National Flag carried by Private William Shellenbergher during his war service with the Company F, 55th Illinois Infantry. Shellenbergher fought in the Battle of Shiloh, being killed on the first day of fighting. Buried close to where he died with other members of the regiment who fell in the battle, his surviving comrades, who found this flag in his possession, draped it across his body during the burial service. The dark stains being the blood from his fatal wound. They then secured the flag and sent it and other personal possessions to his family in Illinois. The flag and a photo of Shellenbergher were donor-gifted to the park, 150 years to the day of his being killed in the battle on April 6, 2012.



Private William Shellenbergher's personal National Flag.

## 2.3. Visitor Experience

### Visitor Numbers and Visitor Satisfaction

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Number of Visitors	Number of visitors per year		The total of 536,206 visitors to the park in 2013 is higher than the 10-year average of 377,615 visitors for 2003–2012. This increase is based on road traffic counts. Less than 10% of total visitors documented to be entering the park are actually entering the two visitor centers.
Visitor Satisfaction	Percent of visitors who were satisfied with their visit		Based on annual visitor satisfaction survey the percentage of visitors satisfied in FY 2013 was 100%, which is higher than the average for the previous ten years (98.4%).

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



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Education Programs	Number and quality of programs, and number of participants		In 2014, a total of 172 education programs were provided to 9,934 students, an increase of 3,658 students, despite a decrease of 1.2 full-time employees from the previous year.
Ranger Programs	Number and quality of programs and attendance		Park annually provides a diversity and significant quantity of Interpretive programs. In 2014, a total of 845 programs services were provided to 121,020 visitors. In 2013, a total of 1,018 personal programs were provided to 141,567 visitors. The decrease in 2014 for total programs is attributed to possessing 1.2 fewer full-time employees to provide personal interpretive activities. Park has managed to maintain permanent interpretive staffing levels, but is losing ground in ability to fund temporary employees to provide personal services.
Junior Ranger Programs	Number of programs and attendance		A total of 1,741 youth visitors took part in this program in 2014, a significant decrease from 2,976 junior rangers in 2013; but substantially up from the 1,162 young visitors participating in the program in 2012.
Special Events	Variety and longevity of events, community involvement		The significance of Special Events to the park visitor experience is documented through the positive effect of the 2012 Sesquicentennial Program, whereupon the park provided 1,420 personal programs for a total of 258,706 visitors during the fiscal year. With the exception of the 150th anniversary commemorations, the size and frequency of special events has dropped dramatically due to funding constraints and the unavailability of volunteers/living historians.

## Resource Brief: Shiloh Battlefield Driving Tour

Up until 2008 portions of the former tour route were closed due to unsafe conditions and a collapsed bridge. Visitors were unable to access portions of the battlefield such as Jones Field, and Dill Branch, which are critical to an understanding of the Battle of Shiloh. Federal Highway reconstruction of these closed routes, finished in 2010 provided safe public access to these areas. A new upgraded park brochure and directional signs have incorporated these newly opened areas as part of an expanded tour route. A total of 32 new waysides are nearing final production for installation on the battlefield in 2015 with accessibility upgrades at each location. Two additional stops will be added to the tour route to provide increased coverage of the second day of battle. This should provide visitors at Shiloh with a complete tour of the field of battle and a more comprehensive understanding of the battle and its context. The newly opened route has also provided access to the Shiloh Indian Mounds National Landmark, which has been enhanced with an interpretive kiosk and trail around the village site with 13 new wayside exhibits, thus enhancing this aspect of the visitor experience. The tour route and waysides when installed will provide a complete tour for park visitors to Shiloh requiring only routine maintenance to provide a quality visitor experience.



Siege guns at tour stop 1, Grant's Last Line on tour route at Shiloh Battlefield with 24-pounders mounted on siege carriages. NPS Photo.

## Resource Brief: Shiloh Commemorative Anniversary Event



Ranger speaking to group of visitors during April Shiloh Anniversary tour. NPS Photo.

Shiloh National Military Park has always been active in presenting Special Event programs to the public. These events range from small living history events to large scale events such as the Sesquicentennial observance in 2012. A total of 104,266 people journeyed through the park (all sites/resources in Tennessee and Mississippi) from March 28th–April 8th. This twelve-day Sesquicentennial attendance figure represents roughly 30% of the total annual park visitation recorded in 2011. Interpretive activities were varied, and provided unique experiences not only to adults but also to school age children. The unique programs included the premiere of the new Shiloh Battlefield orientation film attended by 850 people. A youth oriented program involved 36 children (Grades 4th–6th) who were taught the manual of arms, wrote letters back home to family, kept notes in journals of their experiences, and culminated in an overnight stay in reproduction Civil War camps. Traffic counts recorded an estimated 15,000 visitors participated in the commemorative evening Shiloh Sesquicentennial Grand Illumination, with 23,746 candle luminaries representing the total number of casualties of the epic

battle. The event also provided a Civil War music program, an evening program focusing on Women as Soldiers in the Civil War. The park supported two special living history events (The Confederate Approach March from Corinth to Shiloh, and the arrival of General Buell's Army of the Ohio), which involved 700 Civil War reenactors. Thousands of visitors attended ranger led hikes and tours across the battlefield, and the event was recognizable outside the park's immediate range of interpretation as C-SPAN recorded the park's historian delivering a key note address for a later broadcast.

In 1988, on the anniversary of the battle, Shiloh National Military Park initiated a living history weekend to provide a unique experience for the public to view reproduction Civil War period campsites, which provided insight into the life of Confederate soldiers. To coincide with the encampments, Civil War reenactors presented tactical field exercises and historic weapon firing demonstrations. The intent was to represent to the public how a skirmish would evolve into a battle. This large scale living history event was extremely successful and this annual two-day event was attended by over 15,000 visitors. This has been a successful educational event; however, the park has postponed this activity since 2013 due to budget constraints.

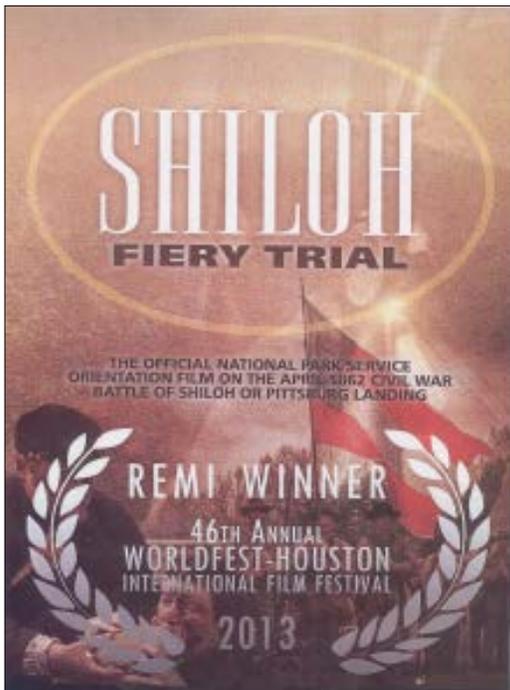
As part of the anniversary commemorative weekend, Shiloh Battlefield began offering in-depth hiking tours in order to provide a historical based activity and reach a wider range of audience. These tours are offered at the same time of day as the original battle action in 1862. To assist visitors with mobility issues car caravan tours are offered for those with accessibility needs. The permanent park staff with assistance of park volunteers provides an average of 20 interpretive programs to 600 visitors annually. This programming has been well received by the public, and continues to be a successful annual event.

Interpretive Media – Brochures, Exhibits, Signs, and Website			 <a href="#">web</a> ▶
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Wayside Signs	Condition and currency of signs		Signs are new for Shiloh Indian Mounds National Historic Landmark Trail and interpretive shelter. A total of 32 new waysides are nearing final production for installation on Shiloh Battlefield in 2015, with accessibility upgrades programmed at each wayside location site. At Corinth, a uniform standard wayside exhibit plan is required.
Park Directional Signs (off-site)	Usefulness, quantity, and placement		New sign program implemented within the last five years in both Tennessee and Mississippi. No major adverse issues documented. A handful of these signs have been affected by human and weather related incidents, but all are in place.
Exhibits	Shiloh Battlefield Visitor Center		Shiloh Battlefield Visitor Center (circa 1989). New cases installed in last three years. Some text and graphic components showing wear and need to be replaced. Long Range Interpretive Program recommends renovation of these permanent exhibits. Park staff produces temporary exhibits as needed on an unscheduled basis, generally averaging 7 per year.
	Corinth Civil War Interpretive Center		Corinth Civil War Interpretive Center (circa 2004). State of the art interpretive design, with a diversity of audio-visual media and static exhibits, both interior and exterior. Some indoor exhibits need replacement. Park plans to install Ultra-Violet protection on all windows in 2015. Park staff actively providing temporary exhibits.
	Tennessee River Museum		Park has actively partnered and provided technical expertise for the planning, design and the curation of exhibits at the Tennessee River Museum in Savannah, Tennessee.

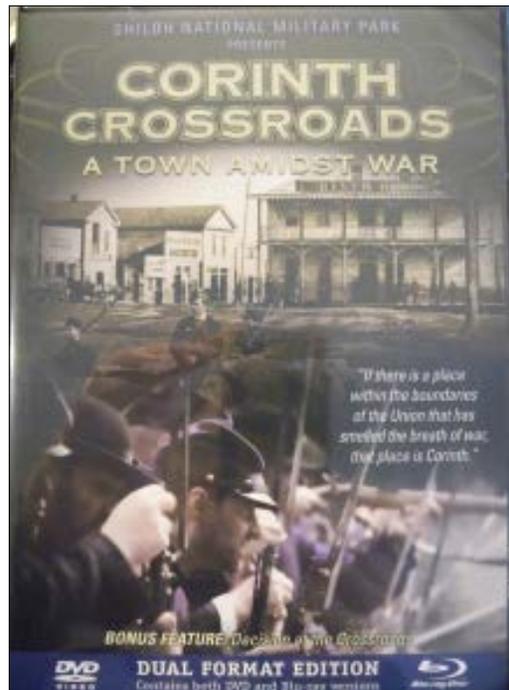
<b>Print Media</b>	Accuracy and availability of primary park publications		Park brochure is up to date and when last upgraded significantly increased in size. Further changes being made for the next printing to reflect alteration of the Shiloh Battlefield Auto Tour. There is a diversity of site specific informational brochures produced by the park staff on an annual basis. Junior Ranger publications are up to date and available to all young visitors.
<b>Audio-visual Media</b>	Orientation Films		Since 2004, the park has produced four interpretive films. All are high quality and have increased the visitor understanding of the resources.
	Other AV material		Exhibits for the Corinth Civil War Interpretive Center are of high quality and are programmed to be updated for accessibility in 2015. The Shiloh Battlefield Audio Tour CD is being updated in 2015. In addition, park interpretive staff develops and offers audiovisual programs for a number of on- and off-site personal and education programs.
<b>Websites</b>	Currency and scope of website; number of website visitors		Website is active, with weekly page views of 4,500–5,000 hits. Staff keeps information up to date particularly the information visitors need to know prior to arrival if planning a visit.
	Social media: Facebook updates and “likes,” overall activity		Park social media program is strong, providing multiple daily posts on <a href="#">Facebook</a> and <a href="#">Twitter</a> , with intermittent <a href="#">YouTube</a> posts. Shiloh is a leading National Park Service Civil War site in visitors served with social media. Total park “followers” on Twitter currently exceeds 2,795 with nearly 19,500 likes on Facebook. Weekly totals for people contacted with posts fluctuates from 12,000 to more than 16,000 visitors reached.

## Resource Brief: Shiloh/Corinth Orientation Films

Since 2004 Shiloh National Military Park has produced four new interpretive films for Shiloh and the new Corinth Civil War Interpretive Center. The *Shiloh – Fiery Trial* film premiered in 2012 at the Shiloh Visitor Center to replace a film that had been shown since 1956. The new film has received unanimous praise from visitors and won the REMI Award at the Houston International Film Festival in 2013, as well as The Keeper of the Light Award, and the NAI Award. Two new films were produced for the Corinth Interpretive Center on the Shiloh and Corinth Campaigns when the Center opened in 2004, as part of the museum. In 2013, *Corinth, A Town Amidst War* premiered as the orientation film at the Corinth Interpretive Center auditorium. These new AV productions provide an up-to-date and comprehensive orientation for visitors to both sites. These films will satisfy the parks permanent audiovisual needs for the near future.



Cover of DVD for *Shiloh – Fiery Trial* film with REMI Award insignia. NPS Photo.



Cover of DVD for *Corinth; A Town Amidst War* film. NPS Photo.

## Resource Brief: The Stream of American History

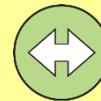


Stream of American History, Corinth. NPS Photo.

Set in the courtyard of the Corinth Civil War Interpretive Center, the water feature utilizes stone, bronze, and flowing water to represent a turbulent century in American history. The moving stream symbolically depicts first the birth and expansion of the United States and the accompanying rise of sectionalism; then the momentous events of the Civil War, and the difficult period of reconstruction.

The flowing water is the United States, which splits with contact with the first of fifty-seven granite blocks representing the myriad battles and campaigns. The divided waters are the two warring sections of the nation caught up in the epic struggle, and the reflecting pool brings a placid calm to the reunited waters. This tranquil pool and a spray of fallen bronze leaves invite visitors to contemplate the causes and the costs of the war.

## Scenic Resources



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Scenic Views	Scenic Views Quality & Protection		Shiloh Battlefield is renowned for being one of the most pristine battlefields in the country. Its scenic views inside and outside the boundary are in good condition. There is little pressure from development, and park management is continuously working with stakeholders to retain its quality.

## Accessibility



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Mobility	ADA compliance		Visitors have mobility accessibility to all public facilities and interior exhibits. All high visitor impact resource locations are mobility accessible, with mobility accessibility renovations planned for all auto tour stops at Shiloh in 2015.
Visual Accommodation	ADA compliance		Both park orientation films, and the two Corinth exhibit films, operate with visual accommodation.
Auditory Accommodation	ADA compliance		Both park orientation films provide auditory accommodation. The two exhibit films at the Corinth Civil War Interpretive Center are funded to provide auditory accommodation in 2015.
Multi-lingual Resources	Audio and print materials in multiple languages; Bi-lingual staff		Park has no multi-lingual audio or print interpretive and educational resources. No bi-lingual employees work on the park staff.

### Resource Brief: Visitor Accessibility

Visitors currently have mobility accessibility to all public facilities and interior exhibits. All high visitor impact resource locations are mobility accessible, with mobility accessibility renovations planned for all auto tour stops at Shiloh in 2015. Both park orientation films, and the two Corinth exhibit films, operate with visual accommodation. Both park orientation films provide auditory accommodation. The two exhibit films at the Corinth Civil War Interpretive Center are funded to provide auditory accommodation in 2015.

# Safety



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<b>Visitor Safety</b>	Recordable incidents		The safety of visitors is a park priority. The park works to quickly identify and mitigate potential hazards, and the number of accidents is very low. Only two significant visitor injuries have been documented during the last five years.
<b>Staff Safety and Training</b>	Number of staff trained		Operational Leadership Training has been completed by all permanent park staff, and CPR, First Aid, and AED training are offered to staff on a space-available basis. Job Hazard Analyses are conducted before working on jobs throughout the park. Regular safety messages are given and distributed to staff members. A Safety Committee meets monthly and quarterly; all-hands safety meetings are programmed for 2015.

## Resource Brief: Visitor Safety

Visitor safety has been emphasized in personal contacts and in all print and social media. Site bulletins and notices have been posted and distributed at information desks. Visitors are warned about immediate hazards and safety messages are incorporated into all guide programs. Safety messages are included on social media and park hazards have been identified on the Park’s Website. The park works to quickly identify and mitigate potential hazards, and the number of accidents is very low. Only two significant visitor injuries have been documented during the last five years.

# Partnerships



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
<p><b>Volunteers</b></p>	<p>Number and hours contributed</p>		<p>A total of 270 general volunteers contributed 4,202 hours of service in 2014. In addition, 2 Student Conservation Association (SCA) interns contributed another 826 hours, and one International VIP/Intern from Germany contributed 448 hours; while 48 Scout Volunteers provided 169 hours. Total participation for 2014, involved 321 volunteers contributing 5,645 hours. This compares favorably to 2013, which recorded 347 volunteers (e.g. 315 general, 1 SCA, 31 Scouts) contributing 3,803 hours.</p>
<p><b>Partnerships</b></p>	<p>Number of official and unofficial partnerships</p>		<p>Park maintains and coordinates an extremely strong and productive partnership program in relation to Interpretation and Education Services with gateway communities, two Friends organizations, two county tourism offices, several local museums, the States of Tennessee and Mississippi, Hardin County Schools, Alcorn County and Corinth City Schools, four National Heritage Areas in Tennessee and Mississippi, Mississippi State University, the Ulysses S. Grant Association, Tennessee Civil War Preservation Association, Tennessee War's Commission, Parker's Crossroads Battlefield Association, Big Hill Pond and Pickwick Landing State Parks, and the Civil War Trust. This partnership is reflected through technical assistance and support provided for planning and designing of interpretive exhibits, brochures, social media, symposiums, special events (e.g. on and off site), historic preservation of sites and commemorative features, research, etc.</p>

## 2.4. Park Infrastructure

### Overall Facility Condition Index



[web](#) ▶

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

Asset Category	Number of Assets 2009 / 2014	FCI 2009 / 2014	Condition Status/Trend	Rationale
<b>Buildings</b>	30 / 32	0.032 / 0.012		All but three park buildings are in good condition. One is in fair, and two are showing poor condition due to deferred maintenance costs. With the addition of cyclic maintenance dollars, the condition of park buildings will continue to improve.
<b>Waste Water Systems</b>	9 / 9	0.029 / 0.000		All waste water systems are in good condition. All the systems at Shiloh are septic systems and the Corinth Interpretive Center is connected to the city of Corinth Public Utilities.
<b>Water Systems</b>	7 / 7	0.000 / 0.000		All water systems are in good condition with no deferred maintenance cost associated. All water at Shiloh is delivered from Michie Water System and Corinth is from Corinth Gas and Water.
<b>Unpaved Roads</b>	10 / 4	0.072 / 0.000		There are now four unpaved roads on the park. All of these unpaved roads and sections are in good condition and maintained by the park. Several roads were recently paved and added to the auto tour route.
<b>Paved Roads, Parking Areas, Bridges, Tunnels</b>	26 / 32	0.114 / 0.160		Roads and parking areas have the highest deferred maintenance cost of any assets in the park. The decreasing FCI is due to lengthened cyclic maintenance schedules and lack of funding. Many of the park’s primary roads and parking areas are in good condition. Paved roads in the park are maintained by federal highway administration.

All Others	13/ 15	0.049 / 0.007		<p>These assets are probably some of our most iconic and historically significant assets that we maintain. These include all of our maintained landscapes, monuments, cannon carriages, markers and plaques, earthworks, Indian Mounds, and picnic area. Also computers, radios, and telephone and fuel systems are in these assets. All of these are in good condition.</p>
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## Resource Brief: Energy Conservation and Recycling



New energy efficient bulbs and ballasts. NPS Photo.

In 2013 the park received funding to implement specific energy conservation measures in the visitor center, maintenance shop, and seven other buildings. The project included replacing T12 light fixtures and ballasts with new T8 electronic fixtures and ballasts. Also, occupancy sensors, LED, and CFL bulbs were installed.

The recycling program continues to grow with added recycling containers. With the reduction of trash containers, the waste diversion percentages continue to increase to over 70%, exceeding the Department of Interior’s goal of a 50% diversion-rate by fiscal year 2015.

## Resource Brief: Green Parks Plan

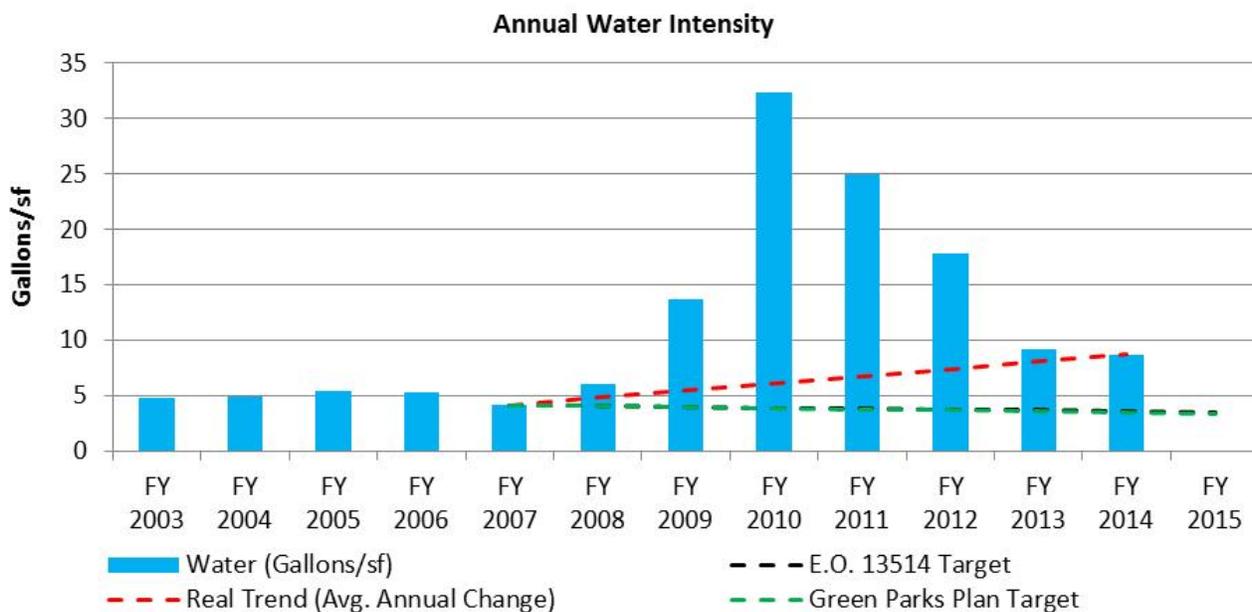
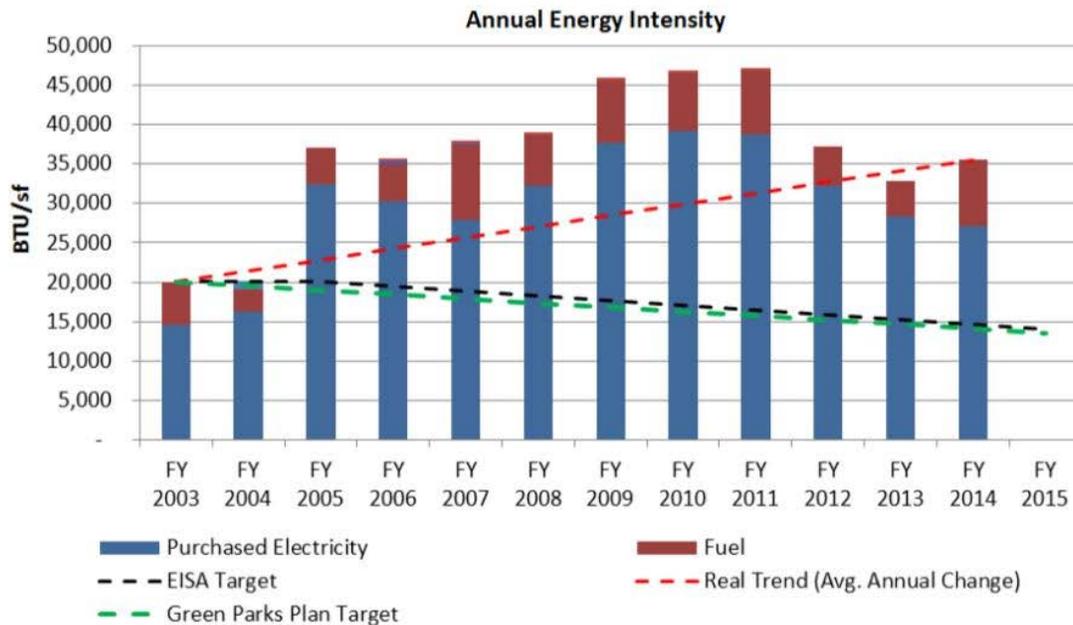
The NPS manages the largest number of constructed assets of any civilian agency in the Federal Government. It operates more than 67,000 structures that account for more than 50 million square feet of constructed space such as visitor centers and historic structures. The [Green Parks Plan](#) (GPP) defines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

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

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

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

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



Highlights for SHIL include:

- With the addition of Corinth in 2004 energy usage was increased. While looking at the graph, it is important to see the downward trend of energy usage in recent years while incorporating new lighting technology. Besides upgrading to T8 lights, fixtures, and ballasts, new lighting sensors were installed to turn lights off when no one is working. Also new LED and CFL bulbs were installed. No T12 light fixtures remain in the park.
- The graph also shows a good downward trend in water usage in recent years. Updated fixtures in housing units as well as park buildings have helped reduce water usage.
- In FY 2010–2012 an increase in water usage is due to non-recurring maintenance projects and changes to the park water system metering.

# Chapter 3. Summary of Key Stewardship Activities and Accomplishments

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## Activities and Accomplishments

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

### Natural Resources

- Cumberland Piedmont Network completed inventories of vascular plants ([2004](#)), wetlands ([2008](#)), amphibians and reptiles ([2006](#)), birds ([2006](#)), and mammals ([2007](#)) for the park.
- Cumberland Piedmont Network has initiated long term vital signs monitoring for water quality, ozone and foliar injury, and forest communities.
- Updated Fire Management Plan (2013) including the addition of prescribed burns as an effective forest management tool to reduce heavy fuels, etc. First successful burn in the modern era of park management occurred in 2014 ( $\approx$  170 acres), with a successful second larger burn in 2015 ( $\approx$  390 acres). Burns reduced buildup of heavy fuels and minimized thick forest duff.
- Exotic plant treatment and reduction occurs on an annual basis; and the Exotic Plant Management Team was in the park to reduce invasive plants in 2005, with additional cyclic reduction of invasive plants at various park locations annually since.
- Visitor experience and awareness of the parks natural resources has improved. Park staff has created information available through personal programs, non-personal media, park website, and social media formats.
- The presence of a nesting pair of bald eagles on Shiloh battlefield has generated considerable public interest in park natural resources and their relevant value, including creation of several private websites specific to the Shiloh eagles and park nature photography.
- Performed stream bank stabilization project for 1.5 miles of the park's Tennessee River shoreline. The stabilization provides a relative long-term stable environment to better preserve park resources located along the park's eastern river boundary, such as the National Cemetery and Shiloh Indian Mounds.
- Shiloh battlefield landscape restoration program has been active since 1992. This program has been vital in the restoration of a variety of places to their historic dimensions, including Larkin Bell, Duncan, Barnes, Stacy, Sarah Bell, and Cloud fields. The efforts also contributed to the restoration of 100 acres of forest, and restoration of orchards at Larkin Bell field and the Peach Orchard. Implementation of a new mowing schedule for park maintained fields and rights-of-way now maintains the landscape with a more authentic 19th-century appearance, and enhances habitat for native flora and fauna.

### Cultural Resources

- The Land and Water Conservation Fund Battlefield program funded land acquisition in 1989–1990 to strengthen preservation, interpretation and education of the history of the battles of Shiloh and Corinth ( $\approx$  150 acres). This important first step led all subsequent modern efforts to acquire remaining lands within the authorized boundary for Shiloh battlefield and the initial preservation of the Corinth battlefield sites.
- The Civil War Trust has purchased for preservation about 2,800 acres at Shiloh, Fallen Timbers, Corinth, and Davis Bridge since 1990.
- Provide support for the acquisition, preservation, interpretation, and education concerning Parker's Crossroads, Brice's Crossroads, Britton's Lane, Iuka, Fort Henry, and Davis Bridge battlefields in West Tennessee and north Mississippi. Work in this area has expanded and enhanced the context of cultural resource preservation on about 3,000 acres of nationally significant Civil War sites in the southeast region since 1990.
- Restored nearly 100 War Department cast iron historical camp, troop position, and small markers across Shiloh battlefield since 2000.
- Within the Shiloh National Cemetery, performed preservation, maintenance, and headstone realignment projects (2011–2012).
- Installed 50 new cannon carriages since 2000 and created new Siege Battery and Navy Artillery exhibits on Grant's Last Line and Dill Branch respectfully. To date, 25% of the park's original cast-iron carriages have been replaced with new carriages.

- Conducted cyclic carriage preservation maintenance program since 2000. To date, 50% of the 200 carriages on the park have received preservation maintenance since 2013.
- Erected two new State commemorative monuments at Shiloh (Tennessee in 2005 and Mississippi in 2015) and commemorative statues and interpretive features at the Corinth Contraband Camp (2009).
- Restored broken and missing features on the Confederate Monument and Iowa Monuments at Shiloh battlefield and at the Corinth Contraband Camp.
- Apprehended and prosecuted several violators under the Archeological and Resource Protection Act. Staff received the 2001 SER Award for Archeological Resource Protection.
- The National Park Service's Southeast Archeological Center has conducted multiple archeological investigations since 1979, which have enhanced park preservation and planning, and public understanding and appreciation of Civil War Shiloh and Corinth, and Native American heritage preserved within the Shiloh Indian Mounds National Historic Landmark.
- Updated Shiloh Administrative History (75% draft); Shiloh Historic Resource Study (90% draft); Shiloh-Land Protection Plan (2002); and annual Land Acquisition Ranking System Reports (previous submissions through FY 2017).
- Shiloh List of Classified Structures (2013) updated to include War Dept. markers, National Cemetery Headstones, and New Deal historic structures.
- Collaborated on "Tennessee's Civil War Parks: A Resource Assessment," prepared with the National Parks Conservation Association, Washington, DC, 2009.
- Worked with private land owners and county officials in Tennessee and North Mississippi to complete a thorough GPS Survey of Surviving Civil War Features in Corinth/Alcorn County, Mississippi, Hardin, McNairy, and Hardeman Counties in Tennessee, with technical assistance from the National Park Service's Cultural Resource GIS office in Washington, DC (1995). This project materially aided the legislated expansion of the park to include new lands since 2000.

#### **Partnerships**

- Siege and Battle of Corinth Commission: 25+ year association for preservation, planning, management, interpretation, education, special events, etc. in Alcorn County and Corinth Mississippi.
- Friends of Shiloh Battlefield: 20+ year association that has aided battlefield preservation, land acquisition, resource management, interpretation, and commemoration of the park's Shiloh Battlefield Unit and related historic sites off the park.
- Tennessee River Museum and Team Hardin County: 20+ year effective partnership to provide meaningful education and recreational experiences for the visiting public on area, county, and park history.
- Presented the Corinth Contraband Camp Symposium (two days of events in 2014, partnering with the City of Corinth, Mississippi State University, and numerous partners serving nearly 1,200 visitors).
- Worked cooperatively and provided technical assistance for the Civil War Trust, Friends of the Siege and Battle of Corinth Commission, State of Tennessee, and Friends of Shiloh Battlefield to effect important battlefield purchases to successfully preserve ≈ 2,800 acres at Shiloh, Fallen Timbers, Corinth, and Davis Bridge battlefields since 1990.
- Maintained long-term effective interagency management and preservation partnerships with Tennessee Historical Commission, Tennessee War's Commission, Tennessee State Parks and Department of Conservation & Environment, and the Mississippi Department of Archives and History; these partnerships materially benefit the preservation and management of cultural resources both on and off the park.
- Working successfully with the Ulysses S. Grant Association (Ulysses S. Grant Presidential Library) to provide interpretive and education programs including the 150th Teachers Workshop on the Civil War (2011), Corinth Contraband Camp Symposium (2014), and the U.S. Grant to Lyndon B. Johnson Symposium: From the 15th Amendment to the Voting Rights Act (2015).

#### **Visitor Experience**

- Design and construction of the Corinth Civil War Interpretive Center (completed 2004). This 15,000 square ft. Center contains state of the art exhibits related to the causes, events, people and consequences relevant to the compelling history of Corinth and the Civil War in the West, two exhibit films and related AV, graphic exhibits and integrated interior and exterior visitor experience.
- Shiloh Indian Mounds NHL Interpretive Shelter and Trail Wayside Exhibits (2009) opened the core area of the village to increased visitor use, utilizing data recovered from recent archeological investigations of the NHL resources.

- Constructed the Corinth Contraband Camp Commemorative/Interpretive Trail (2009).
- Produced new award-winning orientation film for the Shiloh Battlefield Visitor Center: *Shiloh – Fiery Trial* (2012); and new orientation film for the Corinth Civil War Interpretive Center: *Corinth: A Town Amidst War* (2013).
- Working on production of 32 new Wayside Exhibits for installation on Shiloh Battlefield (2015).
- Expanded and updated official park visitor brochure (2010, with updates scheduled for 2015).
- Developed and presented the 2012 Shiloh/Corinth Sesquicentennial Programs, coordinating with numerous partners serving nearly 105,000 from the spring of 2012 through 2015.

### **Park Infrastructure**

- Constructed new concrete bridge and paved three historic roads at the Shiloh battlefield, opening the northern section of the park to daily use.
- Riverbank stabilization along Dill Branch enabled vehicle access to the Indian Mounds.
- Removed asbestos-containing floor tile in the Visitor Center, and replaced with vinyl tile and recycled carpet.
- Installed energy efficient HVAC systems in the Shiloh Bookstore, Cemetery House and four housing units.
- Replaced older vehicles with new hybrid, flex-fuel, and electric vehicles to lower fossil fuel costs.
- Installed new synthetic slate tile roof covering on the Shiloh Visitor Center. This tile, made of recycled rubber and plastics, is sustainable and environmentally friendly.
- Replaced all split rail fencing through volunteer and seasonal work crews.
- Placed new animal-proof trash containers containing recycling bins around the headquarters area, while reducing the amount of trash cans in half to reduce waste stream of solid waste.
- Installed new way-finding signs through a partnership with the states of Mississippi and Tennessee.
- Upgraded security systems in the Corinth Interpretive Center, Shiloh Cemetery House, and Shiloh Visitor Center.
- Demolished dilapidated housing units and rehabilitated grounds to green space.
- Replaced three wooden trail bridges and road sign posts with recycled lumber.
- Rehabilitated the Cemetery House by removing old wallpaper and carpet, and replaced with painted walls and hardwood floors.
- Upgraded mobility accessibility for all general public use facilities (e.g. visitor center, parking lot restrooms and bookstore) 2000–present.
- Completed multi-phased Federal Highway Road Construction projects (2002–2010) enhanced visitor automobile access to Shiloh battlefield, in particular the reopening of Brown’s Landing, Dill Branch, Cavalry, and Sherman Roads to vehicle entry. This opened sections of Shiloh battlefield to all visitors, granting public interaction, interpretation and education of park areas long restricted to direct and safe public access without this important redesign of the park auto tour route.
- Other facility improvements and resource management actions performed the past decade that directly improved or enhanced the park visitor experience are: rehabilitation of public restrooms (e.g. parking lot facility and Shiloh Visitor Center); exhibit case rehabilitation, new floors, and HVAC improvements for the Shiloh Battlefield Visitor Center; cyclic preservation maintenance program for commemorative monuments, statues, and markers on the park, including resolution of preservation issues with concrete based headquarters and mortuary monuments by the construction of French drainage systems.

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

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Shiloh National Military Park has completed a variety of significant planning efforts over the last several years, including a Park Asset Management Plan (2008), Long Range Interpretive Plan (2009), Museum Collection Plan (2010), Museum Security and Fire Protection Survey (2012), Fire Management Plan (2013), Structural Fire Plan (2013), Wayside Exhibit Plan (2014), and a Housing Needs Assessment (2014). These plans and other initiatives, as well as work toward the 2016 Centennial of the Park Service, have helped to form a strategic vision for the park.

Key issues and challenges facing the park, by category:

## Improving Park Interpretation

In general, park interpretation is excellent. The award winning film, *Shiloh – Fiery Trial*, recently replaced the 1956 production film in use for over 56 years. Thirty-two new waysides are in production for Shiloh Battlefield that will replace the 30+ year-old battle-related exhibits. Auto signage is up to date, permitting visitors easy access to Shiloh Battlefield and the Corinth Battlefield Unit. However, the exhibits in the Shiloh Battlefield Visitor Center are very dated (circa 1989), and the facility is in dire need of upgrade to incorporate modern interpretive standards and themes. In addition, a new access plan with signage for all properties located in the Corinth Battlefield Unit is needed to orient visitors to the various discontinuous sites that make up the unit, including the Contraband Camp site that is an important component of the Civil War-to-Civil Rights story. Additional interpretive wayside signage would likely increase visitation at the Corinth sites, once visitors understand the interconnections of all the sites.

The park social media program is strong, providing multiple daily posts on Facebook and Twitter, with intermittent YouTube posts. Shiloh leads all National Park Service Civil War sites in visitors served by social media. Total park “followers” on Twitter is approaching 3,000, and there are over 20,000 likes on Facebook. Weekly total for people contacted through social media fluctuates between 12,000 to 16,000 visitors reached. In March, 2015, we reached almost 150,000 people in less than 24-hours with one post of a then-and-now photograph taken by one of the park staff. The park continues to seek expanded opportunities in the social media arena, with ideas such as park web-based tours, on-demand video, and QR-code links at interpretive sites actively being pursued.

The park has made great strides in increasing visitation in recent years. Even with this increase in visitors there has been a corresponding decrease in the number of ranger-led programs offered. The park is able to maintain permanent interpretive staffing levels, but is losing ground in its ability to fund temporary employees to provide personal services. If current funding trends continue and the park continues to lose purchasing power (flat budget vs increasing cost), some visitor services could be affected in the future like personal services for interpretation. Potential cutbacks in maintenance tasks and visitor services, such as decreased mowing frequency, could occur.

Following the September 1862 announcement of Lincoln’s intent to issue the Emancipation Proclamation, the Union Army established the Corinth Contraband Camp, where formerly enslaved people took their first steps from slavery to citizenship. What began as a tent city eventually blossomed into a thriving community of homes, a school, church, hospital, and a progressive cooperative farm program. The park preserves a small portion of this camp, and the site includes a walking trail, a small parking area, and life-sized bronze sculptures. However, the park has had difficulty attracting an audience to the site, and more could be done to present the Civil War-to-Civil Rights story at this location. In order to accomplish that, improvements to parking, site security, and interpretive programs are needed.

## Improving Park Protection and Integrity

As the second oldest national military park, the existing commemorative landscape on the Shiloh battlefield reflects the contributions of both Union and Confederate Civil War veterans to mark the field of battle in a manner that honors the shared sacrifice and courage of all those present. Not all of the land authorized within the park boundary is owned by the federal government, and acquisition of the remaining parcels is critical to protection of the integrity of the park. In recent years the park has been expanded to include a number of other sites related to the American Civil War in the states of Tennessee and Mississippi. Important sites related to the siege and battle of Corinth and the battle of Davis Bridge have been added to Shiloh National Military Park. Potential additional historic sites that could be added to the park boundary include: additional sites, historic houses, and resources in and around Corinth; 1,100 additional acres at Davis Bridge; 660 acres at Russell House; 440 acres at Fallen Timbers; and sites associated with Parkers Crossroads as an affiliated area. Any future land acquisitions would present operational and stewardship challenges given the limitations of current staffing levels and existing funding. The park has an outstanding relationship with the Civil War Trust, who has been our key partner in land acquisition. Maintaining this relationship and the relationship with the Southeast Region Lands Office is key to acquiring the properties needed to protect the park.

The park possesses a great deal of integrity related to the original sense of place. Due to the rural isolation of the Shiloh and Davis Bridge battlefield properties and their distance from area towns and cities, there is little noise pollution (other than commuter traffic on the nearby highways). However, there is an active quarry site adjacent to the Shiloh battlefield that can be heard clearly from up to one mile or more in the cold season, and from within a half mile in summer. The quarry is in proximity to the Visitor Center and the National Cemetery. There have also been increases in noise from other external sources, including barge offloading operations. The park needs to work toward improving the public understanding of site significance and how park neighbors can participate in preserving the overall integrity of the park.

The park manages historic sites and resources in both Tennessee and Mississippi, resulting in the challenge of working with multiple local law enforcement agencies. Engaging local law enforcement in supporting park resource stewardship efforts such as the Archaeological Resource Protection Act has been challenging. Even though the park is closed at night, access through the park is not limited. With limited staffing at the various sites around the city of Corinth, there are safety concerns for park visitors and having a good working relationship with local law enforcement in Corinth is essential to ensure visitor safety. Building better working relationships with local law enforcement agencies, addressing jurisdictional challenges, formalizing jurisdictional agreements, and seeking joint training are all important needs to address these challenges.

As a major transportation corridor, the Tennessee River played a critical logistical role for the Union army before, during, and after the battle at Shiloh, and Pittsburg Landing was a key factor in the resulting battle at Shiloh. Within the park, Shiloh Indian Mound A is the closest mound to the river, and in the past, portions of this prehistoric mound have eroded into the river. Today, the management of the Tennessee River and its erosion and flooding control falls to the Army Corps of Engineers. Although their efforts to place bank stabilization material along the riverfront seem successful, erosion and bank stabilization in the Shiloh Indian Mound area of the park remains at the forefront of our protection efforts. Climate change could intensify issues along the Tennessee River, since one predicted impact of climate change is more intense flooding events. Other impacts of climate change could affect park integrity, including shifting of vegetation communities and increased prevalence of invasive plants and forest pests.

The park would benefit from the completion of a Cultural Landscape Inventory and Report. No formal, specifically themed, cultural landscape inventories exist for Shiloh or Corinth, and proper management and protection of these resources require better data related to the historical cultural context of the sites.

#### Improving Partnerships

The Shiloh Indian Mounds National Historic Landmark (NHL) located within the boundary of the park preserves one of the finest examples of a complete Mississippian-era archeological village site in the nation. A new interpretive shelter and wayside trail for Shiloh Indian Mounds NHL was opened in 2009. The park has maintained formal relations with the Chickasaw Nation and has a Memorandum of Understanding in place concerning archeological investigations and Native American Graves Protection and Repatriation Act at the Shiloh Indian Mounds National Historic Landmark. However, since 2009 the relationship with the Chickasaw Nation has waned, primarily due to the change of key personnel within the tribe and the park. The park needs to rekindle this relationship and cultivate a closer bond to provide for greater cooperation and mutual benefit.

The park maintains productive partnership programs with its gateway communities, two Friends organizations, two county tourism offices, several local museums, the States of Tennessee and Mississippi, Hardin County Schools, Alcorn County and Corinth City Schools, three National Heritage Areas, Mississippi State University, the Ulysses S. Grant Association, Tennessee Civil War Preservation Association, Tennessee War's Commission, Parker's Crossroads Battlefield Association, Big Hill Pond and Pickwick Landing State Parks, and the Civil War Trust. The park actively participates in and provides technical assistance and support for planning and designing of interpretive exhibits, brochures, social media, symposiums, special events, and historic preservation of sites and commemorative features. The importance of partners and partnerships at Shiloh National Military Park continues to grow and is important to the park's success. A robust relationship with these constituent groups will lead to more active support for the park's mission, help raise awareness of the park's needs, and lead to more devoted engagement in numerous stewardship efforts with the park. Additional growth in partners is possible by reaching out to the Pickwick area, communities surrounding the Davis Bridge and Fallen Timbers sites, and private organizations with an interest in the Civil War (such as the Sons of Confederate Veterans and United Daughters of the Confederacy).

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

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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) and American Barriers Act (ABA)	Laws enacted by the federal government that include provisions to remove barriers that limit a disabled person's ability to engage in normal daily activity in the physical, public environment.
Archeological Sites Management Information System (ASMIS)	The National Park Service's standardized database for the basic registration and management of park prehistoric and historical archeological resources. ASMIS site records contain data on condition, threats and disturbances, site location, date of site discovery and documentation, description, proposed treatments, and management actions for known park archeological sites. It serves as a tool to support improved archeological resources preservation, protection, planning, and decision-making by parks, centers, regional offices, and the national program offices.
Baseline Documentation	Baseline documentation records the physical condition of a structure, object, or landscape at a specific point in time. A baseline provides a starting point against which future changes can be measured.
Carbon Footprint	Carbon footprint is generally defined as the total set of greenhouse gas emissions caused by an organization, event, product, or person.
Cultural Landscapes Inventory (CLI)	A Cultural Landscapes Inventory describes historically significant landscapes within a park. The inventory identifies and documents each landscape's location, size, physical development, condition, characteristics, and features, as well as other information useful to park management.
Cultural Landscape Report (CLR)	A Cultural Landscape Report is the principal treatment document for cultural landscapes and the primary tool for long-term management of those landscapes. It guides management and treatment decisions about a landscape's physical attributes, biotic systems, and use when that use contributes to historical significance.
Cumberland Piedmont Network (CUPN)	One of 32 I&M networks established as part of the <a href="#">NPS Inventory and Monitoring Program</a> . The <a href="#">Cumberland Piedmont Network</a> provides scientific data and expertise for natural resources in 14 parks located in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
Curation	National parks are the stewards of numerous types of objects, field notes, publications, maps, artifacts, photographs, and more. The assemblage of these materials comprises a museum collection. Curation is the process of managing, preserving, and safeguarding a collection according to professional museum and archival practices.
Exotic Plant Management Team (EPMT)	One of the ways the NPS is combating invasive plants is through the Exotic Plant Management Team Program. The program supports 16 Exotic Plant Management Teams working in more than 225 park units. EPMTs are led by individuals with specialized knowledge and experience in invasive plant management and control. Each field-based team operates over a wide geographic area and serves multiple parks.
Facility Condition Index (FCI)	FCI is the cost of repairing an asset (e.g., a building, road, bridge, or trail) divided by the cost of replacing it. The lower the FCI number, the better the condition of the resource.

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

List of Classified Structures (LCS)	LCS is an inventory system that records and tracks the condition of the approximately 27,000 historic structures listed in the National Register of Historic Places that are the responsibility of NPS.
Museum Collection	NPS is the steward of the largest network of museums in the United States. NPS museum collections document American, tribal, and ethnic histories; park cultural and natural resources; park histories; and other aspects of human experience. Collections are managed by professionally-trained NPS staff, who ensure long-term maintenance of collections in specialized facilities.
National Register of Historic Places (NRHP)	The National Register of Historic Places is the official list of the Nation’s historic properties worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service’s <a href="#">National Register of Historic Places</a> is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America’s historic and archeological resources. Listing in the National Register of Historic Places provides formal recognition of a property’s historical, architectural, or archeological significance based on national standards used by every state. The National Register is a public, searchable database about the places.
Native American Graves Protection and Repatriation Act (NAGPRA)	A federal law passed in 1990. NAGPRA provides a process for museums and federal agencies to return certain Native American cultural items (e.g., human remains, funerary objects, sacred objects, objects of cultural patrimony) to lineal descendants and culturally-affiliated Indian tribes and Native Hawaiian organizations.
Natural Resource Condition Assessment (NRCA)	A synthesis of existing scientific data and knowledge, from multiple sources, that helps answer the question: what are current conditions of important park natural resources? NRCAs provide a mix of new insights and useful scientific data about current park resource conditions and factors influencing those conditions. NRCAs have practical value to park managers and help them conduct formal planning and develop strategies on how to best protect or restore park resources.
Priority Resource or Value	This term refers to the Fundamental and Other Important Resources and Values of a park. These can include natural, cultural, and historic resources as well as opportunities for learning, discovery, and enjoyment. Priority Resources or Values include features that have been identified in park Foundation Documents, as well as other park assets or values that have been developed or recognized over the course of park operations. Priority Resources or Values warrant primary consideration during park planning and management because they are critical to a park’s purpose and significance.
Project Management Information System (PMIS)	A servicewide intranet application within the National Park Service to manage information about requests for project funding. It enables parks and NPS offices to submit project proposals to be reviewed, approved, and prioritized at park units, regional directorates, and the Washington Office.
Resource Management	The term “resources” in NPS encompasses the many natural, cultural, historical, or sociological features and assets associated with parks. Resource management includes the knowledge, understanding, and long-term stewardship and preservation of these resources.
Specific Measure of Condition	One or more specific measurements used to quantify or qualitatively evaluate the condition of an Indicator at a particular place and time. There may be one or more Specific Measures of Condition for each Indicator of Condition.
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.

## Volunteers In Parks Program (VIP)

The Volunteers In Parks Program was authorized by Public Law 91–357 enacted 1970. The primary purpose of the VIP program is to provide a vehicle through which the National Park Service can accept and utilize voluntary help and services from the public. The major objective of the program is to utilize this voluntary help in such a way that is mutually beneficial to the National Park Service and the volunteer. Volunteers are accepted from the public without regard to race, creed, religion, age, sex, sexual orientation, national origin, or disability.