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Moccasin Bend National Archeological District
Chickamauga and Chattanooga National Military Park

Moccasin Bend Cultural Landscape Report

Introduction, Part I, and II
April 2014



Moccasin Bend

Cultural Landscape Report

Introduction, Part I, and Part II

April 2014
Prepared by
The Jaeger Company

Under the direction of
Chickamauga and Chattanooga
National Military Park,
National Park Service
Southeast Regional Office
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The report presented here exists in two formats. A printed version is available for study at the park, the Southeastern Regional Office of the National Park Service, and at a variety of other repositories. For more widespread access, this report also exists in a web-based format through ParkNet, the website of the National Park Service. Please visit www.nps.gov for more information.

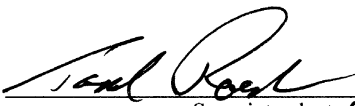
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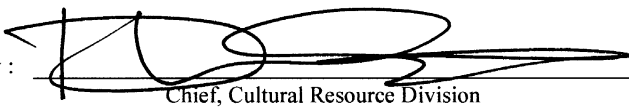
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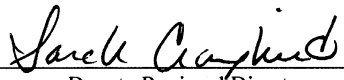
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Moccasin Bend

Cultural Landscape Report

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A topographic map of the Chattanooga, Tennessee area, showing the Tennessee River and surrounding terrain. The map features contour lines, water bodies, and various geographical labels. The title 'Moccasin Bend Cultural Landscape Report: Introduction' is overlaid on the map in a large, dark serif font. The word 'HAMILTON' is printed across the middle of the map in large, spaced-out letters. The word 'CHATTANOOGA' is printed at the bottom of the map in large, spaced-out letters. The Tennessee River is shown winding through the landscape, with several branches and islands. Key locations like Fair Mount, Hickson, King Point, East Chattanooga, and Chickamauga are marked. The map also shows the state boundaries between Tennessee, Virginia, and Georgia.

Moccasin Bend Cultural Landscape Report:

Introduction

H A M I L T O N

CHATTANOOGA

About the *Introduction* divider: United States Geological Survey of Chattanooga, Tennessee. Surveyed under the direction of Gilbert Thompson, Chief Geographer, in 1884. Reprinted in July 1905.

Located online in the U.S. Topo and Historical Topographic Map Collection: <http://geonames.usgs.gov/pls/topomaps/>

INTRODUCTION

MANAGEMENT SUMMARY

This cultural landscape report primarily focuses on the Moccasin Bend National Archeological District (NAD) located in Chattanooga, Tennessee. The study area also includes adjacent public and private properties to provide context and a holistic understanding of the surrounding landscape. This cultural landscape report documents the landscape history and existing conditions within the study area on Moccasin Bend, a site with a long and rich history. A variety of American Indian groups occupied Moccasin Bend. The Cherokee traversed Moccasin Bend on the Trail of Tears, and the area was home to Union soldiers protecting the city of Chattanooga during the Civil War. This document focuses on the historical development of the landscape, inventories the existing conditions, and analyzes the historic and existing conditions to evaluate landscape significance and integrity. This cultural landscape report provides treatment recommendations to guide the rehabilitation and preservation of the landscape at Moccasin Bend.

The site is important for its collection of American Indian sites, primarily associated with the Archaic, Woodland, and Mississippian cultures, a historic road trace used during the Cherokee removal, and collection of Civil War earthworks. Limited archeological investigations at the Bend also suggest potential for Paleo-Indian sites and substantial evidence of Spanish contact with the inhabiting American Indians.

Many 20th-century alterations and developments are visible at Moccasin Bend, including a state mental health hospital, a wastewater treatment facility, a municipal golf course, multiple utility corridors, private residences, a firearms training facility, and a contemporary road system. Many of these

alterations occurred before late 20th-century archeological findings brought the significance of the property to light.

Due to its geographical location within the bend of the Tennessee River, riverbanks define the southern, western, and eastern boundaries of the study area. Stringers Ridge runs along the eastern side of the property effectively screening most of the Bend from the city of Chattanooga. Interstate 24 runs opposite the southern and eastern banks of the river as it wraps around the Bend. The study area is currently composed of a patchwork of NPS-owned parcels interspersed with private, state, and municipal holdings.

HISTORICAL SUMMARY

American Indian use and occupation of Moccasin Bend for approximately 12,000 years make this place a nationally important archeological resource. Moccasin Bend contains portions of the Trail of Tears National Historic Trail, which commemorates the 1838 forced removal of the Cherokee Indians from their homelands by the U.S. government. Additional historic resources include important Civil War earthworks and campsites concentrated along Stringers Ridge. In 1986, out of recognition for the national significance of its cultural resources, 956 acres of the Bend received designation as the Moccasin Bend Archeological District National Historic Landmark. In 2003, Chickamauga and Chattanooga National Military Park (NMP) added 755 acres of the Bend as the Moccasin Bend National Archeological District unit of the park.

The study area contains a variety of prehistoric American Indian resources. Although no Paleo-Indian sites have been located on the Bend, the discovery of two Paleo-Indian period projectile points suggests the potential for these sites exists. Structural and material evidence of Archaic, Woodland, Mississippian,

and historic Cherokee cultures on the Bend represents the importance and dynamism of this cultural landscape. Archeological investigations have verified three prehistoric village sites on the Bend: Vulcan, Mallards Dozen, and Hampton Place. Woodland Indians constructed a mound complex consisting of several mortuary mounds on the Bend, some of which have undergone excavation. In addition to settlements and burials, American Indians also used land on the Bend for hunting, gathering, and various forms of agriculture. Mississippian occupation of the Bend, including two known village sites, ended by the mid- to late 16th century. No further known occupation of the Bend occurred for the next century.

During the 18th century, the Cherokee Indians began to use land on Moccasin Bend, although no village sites are currently evident. By 1805, the Federal Road crossed the Bend connecting the United States with Indian Nation territory. During this time the Brown family, a European-Cherokee family, operated a ferry across the river. John Brown sold his property on the Bend in 1830. In 1838, the U.S. government used the Federal Road as part of the Trail of Tears to remove remaining Cherokee Indians from the eastern United States.

The study area contains several important Civil War-era resources. During the fall and winter of 1863, Stringers Ridge served as an important strategic position for Union army encampments. The army constructed artillery batteries and shelters on the Bend, and many of the earthworks are in good condition. Most of the landowners on the Bend had abandoned their homesteads during this time and presumably did not return until after the war. In the decades following the war, land within the study area changed hands numerous times.

Early archeological investigation began on Moccasin Bend in 1915 with the excavation of several mounds and burials. In the 1960s, archeological activity on Moccasin Bend resumed and efforts to locate American Indian sites have continued until present times.

Archeological discoveries during the 1970s, including evidence of two distinct Mid- to Late-Mississippian towns, highlighted the need for recognition of nationally important prehistoric American Indian sites on the Bend. Looters have degraded numerous sites and much archeological information has been lost from this crime.

Beginning in the 1920s, public debates arose concerning the developmental future of Moccasin Bend. Many citizens supported initiatives to conserve this area as a scenic park, while numerous businesspersons and politicians supported the industrial development of the area. Public debates about the future of the Bend continued until the National Park Service acquired the land in 2003.

During the decades prior to this acquisition, several developments occurred on the Bend. These developments include the construction of the following: Moccasin Bend Speedway (1950s), Moccasin Bend Wastewater Treatment Facility and Moccasin Bend Mental Health Institute (1961), Moccasin Bend Golf Course (1965), a model airplane facility (1950s), a law enforcement firearms training range (1947), construction of radio towers site (1950s/60s), and the Blue Blazes Trail (1989). Also noteworthy is the dredging along the southern edge of the Bend in 1964 during the construction of Interstate 24. According to NPS staff, the Moccasin Bend Golf Course and Moccasin Bend Mental Health Institute may become part of the , Chickamauga and Chattanooga National Military Park upon their closing. The city/county is currently transferring the 13.75 acres of the former model airplane facility to the federal government (National Park Service) by donation. The city/county plans to do the same with the firing range when those functions move to a different site.

SCOPE OF WORK AND METHODOLOGY

The scope of work for part I of the cultural landscape report includes research, development of a site history, inventory and assessment of existing conditions, analysis and evaluation of landscape significance based on national register criteria, and an assessment of landscape integrity. Part II provides treatment recommendations for long-term management reflective of the landscape's significance, condition, and planned use.

The cultural landscape report uses primary and secondary sources to establish historic significance of the landscape and to identify significant periods of development. The site history relies heavily on previous studies at the site and historic photos and maps from the Chattanooga Public Library and the NMP archives. The three-volume "Moccasin Bend National Archeological District Archeological Overview Assessment" authored by Lawrence Alexander and underwritten by Friends of Moccasin Bend National Park provides a comprehensive examination of archeological resources in the study area. The "Development Concept Plan, Environmental Assessment / Assessment of Effect" by the Denver Service Center provides a thorough overview of the study area and documents recent investigations related to choosing a site for a future interpretive center. This report also relies on research by White Star Consulting's "Preservation and Interpretation Plan for Civil War Resources located at Moccasin Bend National Historic Landmark Chattanooga, Tennessee." This document was completed in 1998, revised in 2006, and was underwritten by Friends of Moccasin Bend National Park and funded through the American Battlefield Protection Program. Local newspaper articles and personal correspondence found in the Chattanooga Public Library and the NMP archives provide additional insights into 20th century activities at the Bend.

Field maps and photographic documentation recorded during field investigations provide the basis for describing and assessing the condition of landscape characteristics and features. Several of the properties within the study area are inaccessible due to security concerns. Investigation of these properties was conducted from adjacent properties and using 2010 high-resolution orthophotography provided by Hamilton County, Tennessee. The consultants determined historic integrity of different resources within the study area by analyzing and comparing current conditions with historic conditions (when known).

DESCRIPTION OF STUDY BOUNDARIES

Moccasin Bend is located in the southeastern corner of Tennessee in Hamilton County (figure 1.1). The study area is located across the Tennessee River one and one-half miles west of downtown Chattanooga. This report addresses the majority of the properties that comprise the peninsula of Moccasin Bend.

The Moccasin Bend Archeological District National Historic Landmark represents 956 acres of the Bend. The entire landmark is located within the project area. Additionally, the federal government (National Park Service) owns 755 acres of the Bend, including easements along the riverbanks (figure 1.2). While the entire federal property within this area is part of the study area for this report, the NPS easements along the Tennessee River were not included in the scope of the report. The study area also includes the following city and county-owned properties: Moccasin Bend Wastewater Treatment Facility, Moccasin Bend Mental Health Institute Moccasin Bend Golf Course, the law enforcement firearm training range, and the former model airplane facility. The Moccasin Bend Mental Health Institute property, owned by the State of Tennessee, is included within the study boundaries. Private property in the study area consists of

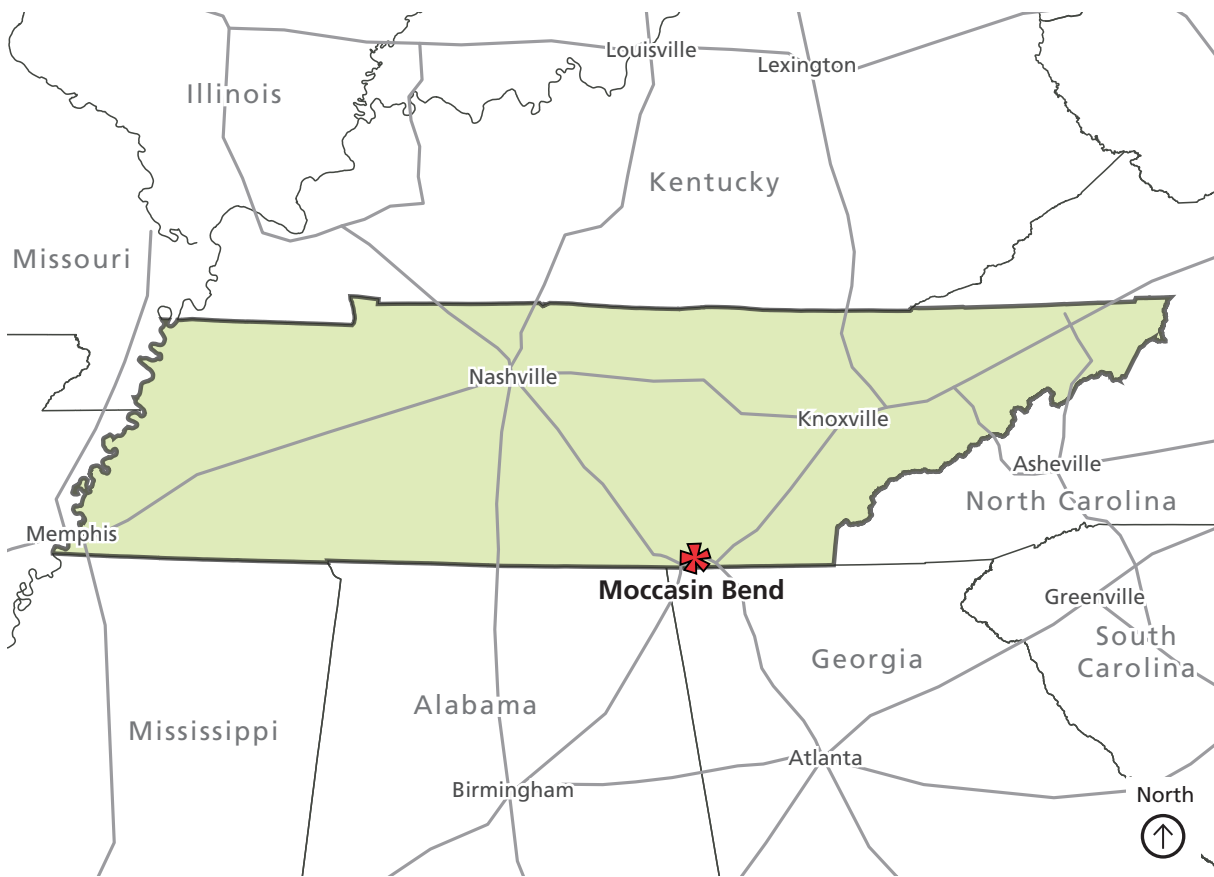


Figure 1.1: Moccasin Bend location map.

the WDEF radio towers site, and an 8.5-acre private residence along Moccasin Bend Road across from the former model airplane facility (illustration 1.1).

SUMMARY OF FINDINGS

Moccasin Bend National Archeological District is included on the “List of National Historic Landmarks” and the National Register of Historic Places lists the historic resources of Moccasin Bend. The national historic landmark nomination notes the significance of the resources at the site under the themes “Original Inhabitants and American Wars.” Moccasin Bend is significant under Criteria A, C, and D of the national register for its association with events that have made an important contribution to the broad patterns of our history; distinctive characteristics of a type, period, and method

of construction; and for its potential to yield important archeological information. Specifically, the study area’s association with prehistoric settlement, European contact with American Indian tribes, Cherokee settlement and forced removal, and the Civil War make Moccasin Bend an exceptionally important cultural landscape.

The periods of significance are: the Paleo-Indian period (10,500–8000 BC), the Archaic period (8000–700 BC), the Woodland period (700 BC– AD 1000), the Mississippian period (AD 1000–1630), the American Indian and European Contact period (1513–1760), the Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal period (1760–1860), and the Civil War period (1861–1865). These developmental periods are represented within the study area and/or are likely to be discovered with

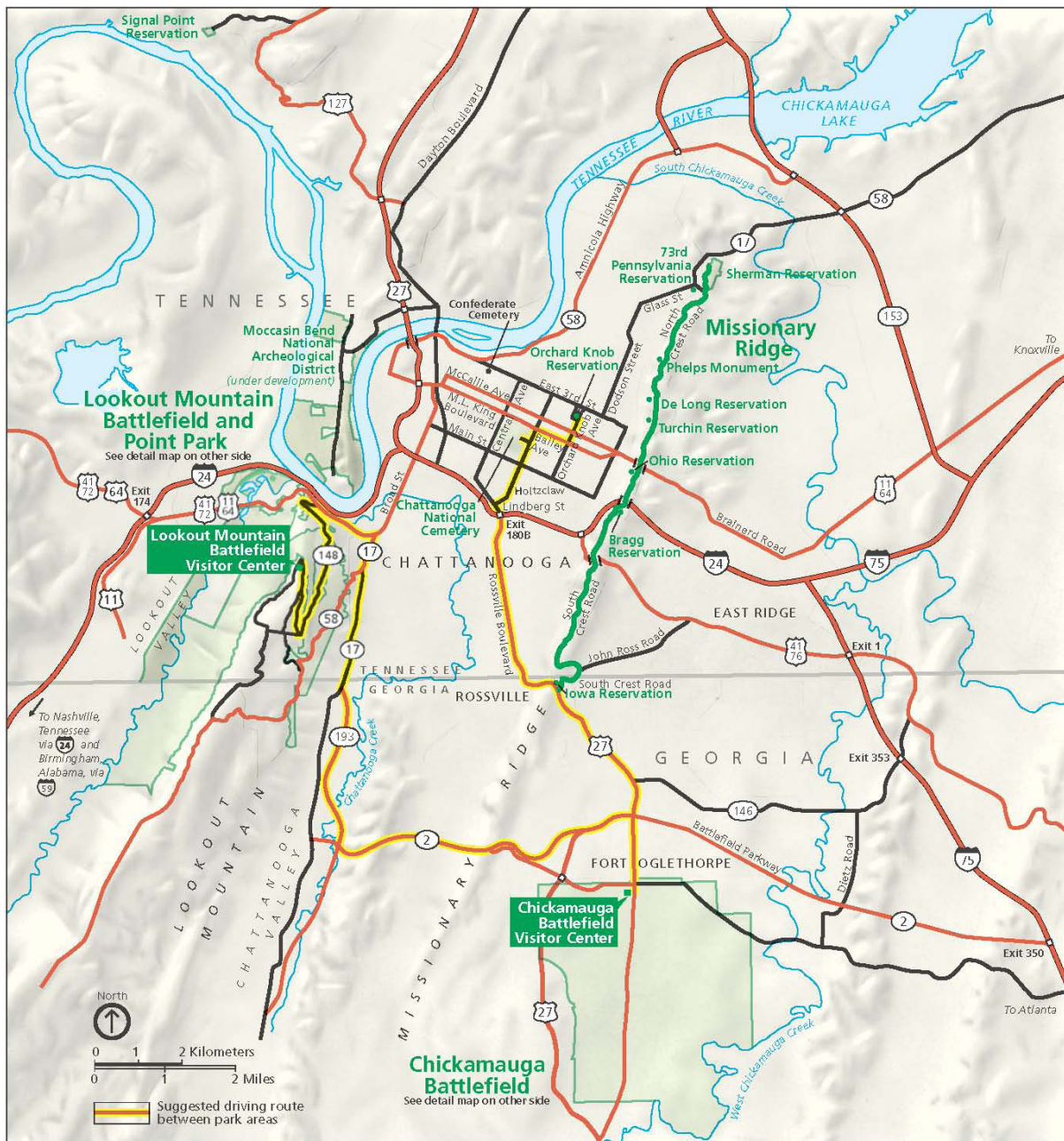


Figure 1.2: Chickamauga and Chattanooga National Military Park Map (NPS 2009).

additional investigation. Known resources and sites are determined to possess sufficient integrity to be listed in the national register.

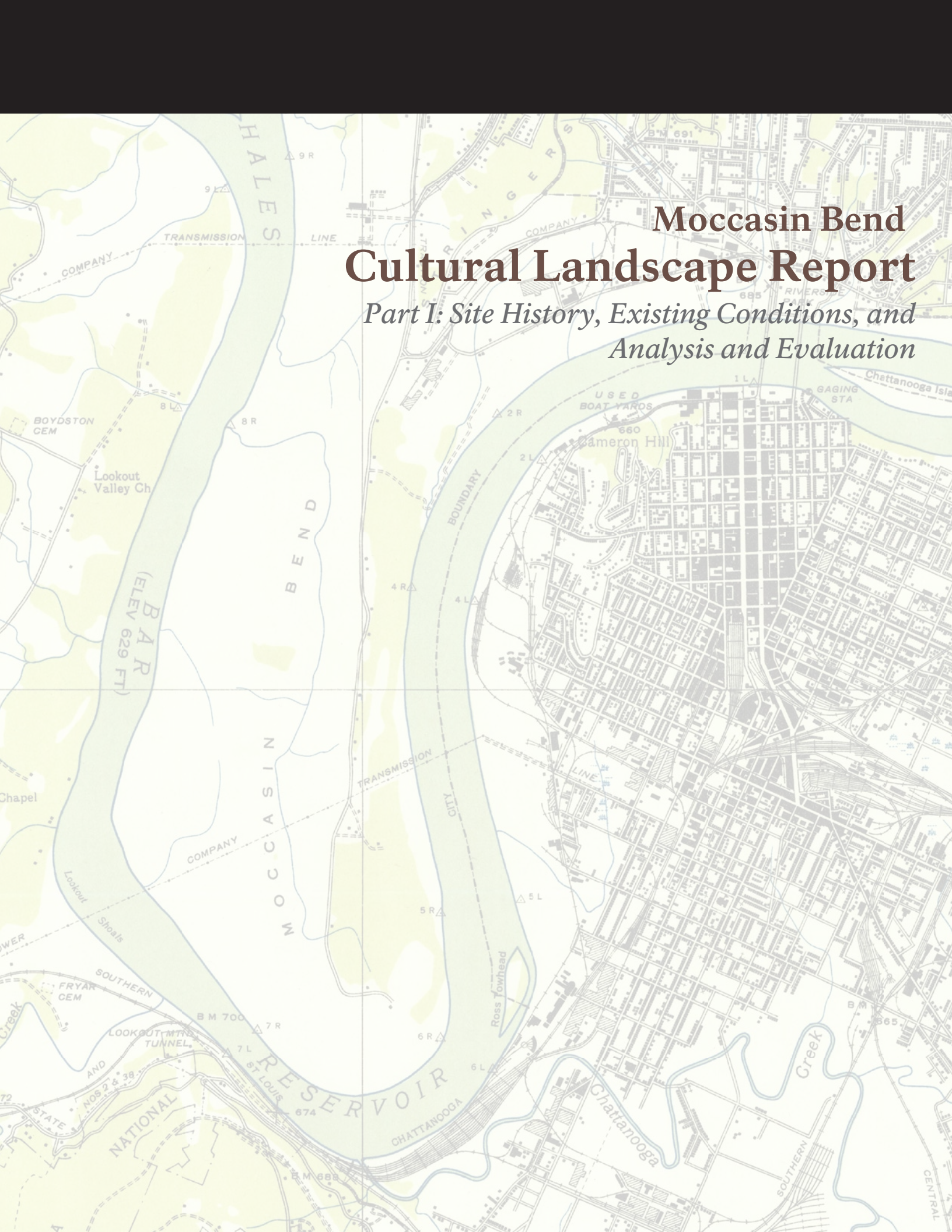
This report includes general descriptions for natural and cultural resources within the study area. Additionally, the report individually defines the following component landscapes: Hampton Place, Mallards Dozen site, Vulcan

site, Woodland Mound Complex, Brown's Homestead and Ferry sites, Civil War sites along Stringers Ridge.

The description of resources within each of these component landscapes includes a condition rating of good, fair, or poor. Generally, the determination of condition for most historic resources within the study area was good.

The integrity of the component landscapes was determined after the condition of the resources had been assessed. A high level of integrity was found for the following characteristics: location, design, workmanship, material, and association. The aspects of setting and feeling were determined to have retained moderate integrity due to natural changes in the landscape and changes in land use. As a whole, the historic resources within the study area retain integrity for the defined periods of significance.

The goal of the treatment recommendations in this report is to preserve and protect existing features that contribute to the historic character of the Moccasin Bend National Archeological District cultural landscape and to provide for protection of the archeological resources within the study area boundary. Additional archeological investigation and delineation as well as a full ethnographic study for the site are recommended for the national historic landmark. Existing aboveground features from the periods of significance require protection and preservation.

A topographic map of the Moccasin Bend area in Chattanooga, Tennessee. The map shows the Chattahoochee River winding through the landscape, with Moccasin Bend highlighted in a light green color. Key features include the Lookout Valley, Cameron Hill, and the Lookout Mountain Tunnel. The map also shows various landmarks such as the Boydston Cemetery, Lookout Valley Church, and the Ross Towhead. A grid of elevation points is visible, with labels like 9R, 8R, 4R, 5R, 6R, 7R, 2R, 4L, 5L, 6L, 7L, 1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L. The text 'Moccasin Bend Cultural Landscape Report' is overlaid on the map in a large, bold, serif font. Below the main title, the subtitle 'Part I: Site History, Existing Conditions, and Analysis and Evaluation' is written in a smaller, italicized serif font. The map background is a light beige color with various shades of green and blue representing terrain and water.

Moccasin Bend Cultural Landscape Report

*Part I: Site History, Existing Conditions, and
Analysis and Evaluation*

About the *Part I* divider: United States Geological Survey of Chattanooga, Tennessee. Compiled by the U.S. Geological Survey from aerial photographs under the direction of Albert Pike, Division Engineer, in 1936.

Located online in the U.S. Topo and Historical Topographic Map Collection: <http://geonames.usgs.gov/pls/topomaps/>

SITE HISTORY

INTRODUCTION

This report divides the site history for the study area into 12 periods. These periods reflect major occurrences in the history of the site. The periods of development are as follows:

- Paleo-Indian period (10,500–8000 BC)
- Archaic period (8000–700 BC)
- Woodland period (700 BC–AD 1000)
- Mississippian period (AD 1000–1630)
- American Indian and European contact period (1513–1760)
- Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal period (1760–1860)
- Civil War period (1861–1865)
- Post-Civil War 19th Century and Early 20th Century (1866–1925)
- Early Preservation Efforts in 20th Century (1926–1960)
- Later Preservation Efforts in 20th Century (1961–1993)
- Friends of Moccasin Bend National Park (1994–2002)
- National Park Service (2003–2012)

THE PALEO-INDIAN PERIOD (10500–8000 BC)

The Paleo-Indians were the first humans to arrive in the eastern United States.¹ These people evidently had a highly mobile hunting and gathering way of life. The artifact markers for this period include a variety of fluted, semi-fluted, and un-fluted lanceolate projectile points. The Paleo-Indian period corresponds to the end of the Pleistocene Era.

1. Lawrence Alexander, et.al, "Moccasin Bend National Archeological District: Archeological Overview and Assessment, Vol. 1." (Wildwood, GA: Alexander Archeological Consultants, Inc., 2010) 31-33.

Paleo-Indian period camps typically consisted of fewer than a dozen people, all closely related. There might be one or two temporary huts and a campfire with little else. Their tools were stone, bone, and wood. Most of the cooking involved dropping heated stones into skin bags or putting game directly onto the coals.

Recent deposits that have buried the best-preserved deposits from this time span have made it challenging for archeologists trying to discover more about this period. Flood deposits 6–10 feet deep over thousands of years often seal the artifacts in their original positions preserving a snapshot in time. In addition, the Paleo-Indian-era deposits were scoured away at many sites where Early Archaic components are found directly overlying truncated Pleistocene subsoil. This challenge is the reason why reports, such as the "Moccasin Bend National Archeological District: Archeological Overview and Assessment" by Lawrence Alexander, often cite a potential for Paleo-Indian sites rather than a documented presence.

To date, a Paleo-Indian site has not been found on Moccasin Bend, but a Beaver Lake point was found in later deposits at site 40HA133,² and a Late Paleo-Indian, Greenbrier point was found at 40HA440 (figure 2.1 and figure 2.2).³ There is potential for undiscovered Paleo-Indian sites wherever alluvial deposits have buried terminal Pleistocene land surfaces. Currently, the nature of Paleo-Indian use of Moccasin Bend remains unknown.

2. Numbered sites refer to state site numbers and not internal NPS numbering (ASMIS).

3. *Ibid.*, 168. and Steven R. Kidd, "Trip Report on Archeological Survey of Possible Visitor's Center Locations at Chickamauga and Chattanooga National Military Park" (CHCH), "Moccasin Bend National Historic Landmark (MOBE)." (Tallahassee, FL: Southeast Archeological Center, 2009).

THE ARCHAIC PERIOD (8000–700 BC)

The Archaic period witnessed the adaptation to the Holocene climate, in addition to increased localization and adaptation to specific environmental settings.⁴ Sedentism and a growing reliance of riverine resources increased during this long period. By the end of the period, groups were experimenting with domesticated plants. A sequence of notched and stemmed projectile points, apparently used in spears, on atlatl darts, and as knives, characterizes the Archaic period.

Early Archaic camps resembled Paleo-Indian camps. By the Late Archaic period, however, the settings resembled towns or hamlets with multiple houses in seasonally sedentary communities (i.e., resided in the same place for one season or more). There was a range of support features including storage pits, grinding stones, and drying racks. The smell, appearance, and texture of the soil (as observed by archaeologists), organically enhanced by human refuse, suggests a long duration of people living in this location. The surface deposits of shellfish indicate regular consumption of this resource. Their boats reflect their mastery of river travel.⁵

For archeologists, the relationship between cultural adaptations and changes in the environment characterizes the Archaic period. Most of the key changes from the late Pleistocene to the modern climate occurred during the Archaic period. Partially due to surviving artifacts at Archaic sites, archeologists have focused on determining how groups used the changing landscape. What types of sites existed in which locations? What resources and locations were important during which seasons?

The period began similar to the Paleo-Indian period, with very small, widely spaced sites. Remains from this period occur deep in alluvial deposition (where they have survived).

4. Alexander. 33-37.

5. For examples, see Wheeler et al. (2003) and Brose and Greber (1982).



Figure 2.1: Two Projectile Points Reflecting Paleo-Indian Presence at Moccasin Bend (Alexander)



Figure 2.2: Projectile Point Reflecting Paleo-Indian Presence at Moccasin Bend (Kidd)

Smaller well-spaced sites gave way to larger sites during the Late Archaic period. The remains of these sites remain buried deep in river terraces. Indeed, the thick overburden, later deposited above certain Archaic deposits, reflects the ongoing evolution of the Moccasin Bend landforms. Therefore, the challenge for archaeologists shifts from finding sites to adequately delineating and evaluating them. With the smaller standard deviations, the practice of precisely dating changes within the subperiods has gained importance over broadly dating changes between subperiods.

The Archaic period encompasses more than 7,000 years of adaptation as the Holocene climate and vegetation became established. Throughout the period, a hunter-gatherer-fisher subsistence strategy remained traditional. By the end of the Archaic period, people began to experiment with horticulture.

In the Southeast, the Archaic diet often is associated with white-tailed deer and hickory nuts.

Archaic period components are known within the study area at sites 40HA63, 40HA133, 40HA139, 40HA140, 40HA146, 40HA147, and 40HA521.⁶ Limited examinations of Archaic-period deposits in alluvial contexts have occurred, and there remains a high potential for additional, important Archaic sites in the unit. The Archaic use of Moccasin Bend probably followed a pattern of residential base camps on the river terraces and smaller resource-specific extraction sites throughout the remainder of the unit.

THE WOODLAND PERIOD (700 BC–AD 1000)

An increased reliance on cultivated plants, the widespread adoption of pottery, the switch to the bow and arrow as principal hunting weapon, and the appearance of burial mounds mark the Woodland period.⁷ Farmsteads, hamlets, and villages often occurring near river bottomlands were common during the Woodland period. The marker artifacts of the period include clay pottery, small stemmed points, and triangular points.

For archeologists, dating the various changes that occurred during the Woodland period is important. Locating preserved household features not far beneath the modern ground surface helps archeologists better understand household and community organization. The increase in the number of sites with substantial midden deposits suggests that good samples of animal bone, shell, and ethnobotanical remains exist for analysis. In addition, ceremonialism became more identifiable in the archeological record with the creation of discrete burial structures and with the linking of ceremonialism to the use of high status items (generally traded long distances).

6. See appendix A.

7. Alexander, 37-39.

Site destruction by looters has created many of the challenges associated with the Woodland period, in addition to the subsequent Mississippian period. There is a long tradition of pillaging sites to recover interesting artifacts. The increased visibility of Woodland sites due to their shallowness below surface and the mounds that first appear in the Woodland period have prompted much uncontrolled relic hunting.

The Woodland period is distinguishable from its predecessor by the beginning of widespread manufacture and use of clay pottery and by a noteworthy emphasis on horticulture. The trend toward longer-term settlements and a riverine/floodplain focus continued from the terminal Archaic period. Three subperiods based on pottery and projectile point types divide the Woodland period into the Early, Middle, and Late Woodland periods.

Large residential and mortuary sites in the unit characterized the Woodland period. Woodland component discoveries have occurred at 40HA63, possibly 40HA130, 40HA133, 40HA140, 40HA141, 40HA142, 40HA143, 40HA144, 40HA145, 40HA146, 40HA147, 40HA440, 40HA517, and 40HA521 (figure 2.1). Within the study area, Woodland sites indicate large hamlets or villages (40HA140, 40HA146, 40HA147, and 40HA440) and mounds (40HA142, 40HA143, 40HA144, 40HA145 and possibly 40HA130). Some of the domestic sites include shell midden deposits (e.g., 40HA133), which are accumulations of dense refuse from shellfish consumed by the Indians. Woodland settlements centered on floodplain and terrace locations.⁸

THE MISSISSIPPIAN PERIOD (AD 1000–1630)

The adoption of shell-tempered pottery, the construction of temple mounds, and the development of hierarchical, chiefdom systems of political organization characterizes the

8. See appendix A.

Mississippian period.⁹ During this period, most of the American Indian population at Moccasin Bend resided year-round in large, palisaded villages surrounded by agricultural fields. Maize, beans, and squash were the staples of the Mississippian-period diet. In addition to shell-tempered pottery, small triangular arrow points mark this period. The settlement hierarchy included villages with temple mounds, villages with no mounds, hamlets, and farmsteads. The major villages often occurred in floodplains and river terraces.

Archeologists of the Mississippian period focus on the trajectories of the development and decline of complex social hierarchies. However, the excellent preservation conditions that resulted from the burning or abandonment of wattle and daub houses provide snapshots of the day-to-day lives of ordinary citizens. The practice of placing many burials beneath house floors links specific individuals to their residential context. Where not destroyed by historic agriculture or logging, Mississippian landscape features are visible on current ground surfaces. As the intensity of site occupation increased from the Paleo-Indian through the Mississippian and as the inferred range of activities that occurred at the site increased over time, archeological potential has expanded exponentially.

Two large villages and several smaller sites represent the Mississippian period within the study area. Sites 40HA63, 40HA141, 40HA146, 40HA440, possibly 40HA517, 40HA521, and 40HA523 have Mississippian components. Site 40HA146 contains two classic Mississippian palisaded villages, probably occupied year-round by a considerable number of people. The minimally investigated site 40HA440 and the now-destroyed 40HA63 may have been village sites. Though not well documented, the smaller Mississippian components within Moccasin Bend may represent outlying

9. Alexander, 39-42.

farmsteads and extractive sites. In the Mississippian period, most of the floodplain and terraces were agricultural fields.¹⁰

One of the challenges facing archeologists that study the local Mississippian period is the timing and nature of Spanish interaction with the local towns. Archeologists agree that there were at least three Spanish expeditions into eastern Tennessee during the mid-1500s. However, the exact route of these exploratory journeys (entradas) is under debate. Much of the informative data on this issue remains in display cases and memories of looters. Looters illegally removed the vast majority of the Spanish material known from sites within the study area. Consequently, it is difficult to know how prevalent the Spanish material is at the site. In addition, it is challenging to provide a refined dating method that might allow archeologists to distinguish between the entradas led by Hernando De Soto during the 1540s and those two decades later of Tristan De Luna.¹¹

AMERICAN INDIAN AND EUROPEAN CONTACT PERIOD (AD 1513–1760)

The Late Mississippian cultures of the Southeast suffered heavy impacts from the arrival of Europeans, their goods, and their diseases.¹² The contact period resulted in massive population losses and survivors often regrouped and relocated.¹³ The Southeast was highly dynamic during the contact period. Materially, the contact period was simply Mississippian with the addition of trade items including beads, metal tools, and textiles. After the establishment of the French and British trading networks, firearms became available to the Indians. Accordingly, an economy developed that centered on hunting for hides.

10. See appendix A.

11. Ibid. 41.

12. The consultants selected a 1513 starting date for the American Indian and European contact period because scholars commonly refer to this date as the earliest known European contact with the present day United States of America.

13. Alexander, 42-45.

The Late Mississippian subperiod overlaps with the first European incursions into the Southeast and some of the observed changes may have resulted from introduced disease epidemics. The local populations during the 16th century were Eastern Muskogean, who spoke the Koasati dialect. There is an ongoing debate regarding the routes of De Soto and De Luna and the locations of communities they visited. Archeologists M. C. R. McCollough and Q. R. Bass III suggest that Moccasin Bend may have been the location of the principal town of Chiaha, visited by De Soto in 1540. Archeologist Charles Hudson argues that De Luna visited the Mississippian towns of Moccasin Bend during the 1560s. Archeologists have recovered Spanish trade goods from human graves at site 40HA146 (figure 2.3-figure 2.6). By 1630, Mississippian groups vanished from the area and apparently moved south into Alabama. Major subsequent Indian presence in the area remained absent until late in the 18th century.¹⁴

The study area appears lightly used by the Cherokees during the 18th century, although no towns are evident at Moccasin Bend.¹⁵ As colonial expansion began to pressure the Cherokees in their traditional homelands, they expanded into eastern Tennessee and formed an alliance with the British. The Cherokees first sided with the British to reduce French influence on the western frontier and subsequently fought with the British against the American rebels in the Revolutionary War. In response, the rebel militias destroyed all of the Middle and Valley towns located in western North Carolina and many of the Overhill towns located northeast of Chattanooga.

14. Ibid. 41.

15. See appendix A.

CHEROKEE SETTLEMENT, AMERICAN COLONIAL SETTLEMENT, AND AMERICAN INDIAN FORCED REMOVAL PERIOD (1760–1860)

By 1760, many Cherokees had adapted their farming and housing styles to those of European Americans. At the end of the 18th century and into the early 19th century, these Cherokees lived in log cabins and tended agricultural fields and orchards.¹⁶ Due to intense contact with the British traders and settlers, the Cherokees obtained a wide variety of European goods. After 1838, the area opened to European American settlement and frontier plantations existed wherever there was suitable land.

In response to the 1776 destruction of Cherokee towns, Chief Dragging Canoe and his followers established the 11 Chickamauga towns in the Chattanooga area. After the Revolutionary War, most Cherokee leaders attempted to finalize a settlement with the Americans that would cede all the Cherokee lands east of the Appalachians in exchange for peace. While the Chickamauga towns resisted efforts to establish peace, European American settlement ultimately prevailed.

The Federal Road construction occurred across Moccasin Bend in 1805. Although locally known as the Federal Road, it was one of a series of wagon roads connecting the United States to the Indian Nations. These roads typically followed previously established trading paths.

Increased trade and missionary efforts among the Cherokees characterized this period and the project area existed at the frontier. The Brown family settled on Moccasin Bend, ran Brown's Ferry (where the Federal Road crossed the river) and a tavern (across the river from Moccasin Bend), and farmed in European-American style (figure 2.7). The Browns were a mixed blood, European-Cherokee family. Beginning around 1805, this situation enabled them to reside in Cherokee

16. Alexander, 42-45.



Figure 2.3: Example of Spanish Trade Goods from site 40HA146 (Alexander)



Figure 2.4: Example of Spanish Trade Goods from site 40HA146 (Alexander)

country and then to enter a land claim after the United States took possession of Moccasin Bend in 1819. In 1820, John Brown received a 640-acre reservation that encompassed much of Moccasin Bend (figure 2.8).

In 1830, Brown sold this property to the Hixsons, who operated the former Brown's Ferry as Hixsons Landing. The ongoing European-American desire for Cherokee lands culminated in the Treaty of New Echota in 1835, which was ratified in 1836. The treaty required the Cherokees to cede all lands east of the Mississippi and to relocate to reservations in what was to become Oklahoma. The relocation process did not materialize as envisioned by the Cherokees. In 1838, the U.S. Government forcibly removed all of the Cherokees in Georgia, Alabama, and southeastern Tennessee from their homes and relocated them in internment camps. One such camp existed in Chattanooga. Beginning in the spring 1838, the majority of the Cherokee



Figure 2.5: Example of Spanish Trade Goods from site 40HA146 (Alexander)



Figure 2.6: Example of Spanish Trade Goods from site 40HA146 (Alexander)

Nation was forced to walk westward on the infamous Trail of Tears. A portion of the Cherokees retained in Chattanooga began their journey west along the Federal Road through Moccasin Bend.

By 1824, European Americans had purchased lands south of the Brown reservation.¹⁷ Prominent early landowners on the southern half of Moccasin Bend included George Russell, R.G. Waterhouse, W.M. Rodgers, James Nyland, James Green, Euclid Waterhouse, and George Birdwell. The tracts of Moccasin Bend underwent splitting, combination, and multiple sales. By 1860, key landowners included Cobbs (233 acres), Adams (233 acres), Summerman (acreage unknown), Blevins (14 acres), and Gamble (130+ acres). An 1863 chart suggests that there may have been eight residential clusters within the study area before the Civil War.¹⁸

17. Ibid. 53-55.

18. Ibid. Figure 17.



Figure 2.7: Brown's Tavern, located west of the project area, across the river (from Digital Collection, Chattanooga Public Library #0005072)

The known archeological sites from this period include the following: the Brown's Ferry landing, south of the Old Federal Road tract; the Brown residence (40HA112), now part of the Moccasin Bend Wastewater Treatment Facility; the Federal Road (40HA532), traversing the Old Federal Road tract from southwest to northeast; and additional antebellum road traces (40HA531).¹⁹ In addition, antebellum farm sites are present at several sites (i.e., a farmstead in a hollow adjacent to 40HA143 and 40HA395, a house site on the southern edge of 40HA135, a hay barn near site 40HA142, and a house site on the southern end of 40HA394), but remain minimally researched.

CIVIL WAR (1861–1865)

A pro-Union sentiment among many Tennesseans prevented the state from immediately following other southern states in seceding from the Union during early 1861. After President Abraham Lincoln called for 75,000 volunteer soldiers to respond to the attack on Fort Sumter in Charleston, South Carolina, the Tennessee Legislature voted to support the Confederate States on May 7, 1861. Tennessee seceded from the United States on June 24, 1861, and joined the Confederate States of America on July 22, 1861. Tennessee's location along the northern

19. See appendix A.

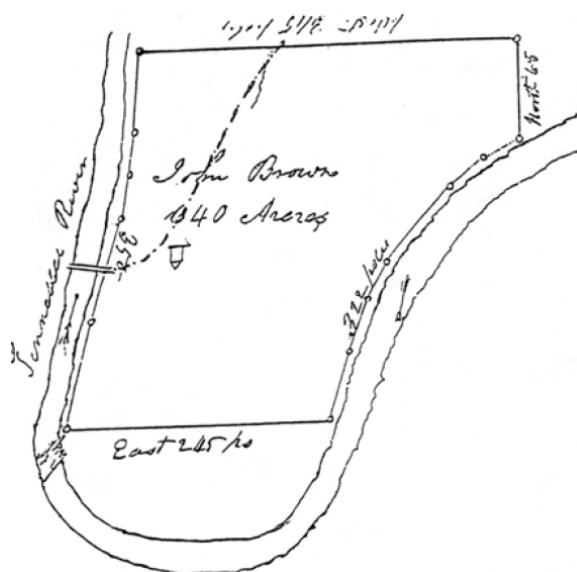


Figure 2.8: Houston and Armstrong's Survey of John Brown's Reservation (Alexander)

border of the Confederacy ensured it would be of strategic importance if the political disagreement became an armed conflict. The Tennessee River and Cumberland River flowed through Tennessee before joining the Mississippi near the northwest corner of the state. The state was also home to major railroad facilities and contained important east-west and north-south railroad lines.

The Union invasion of Tennessee occurred near its northwest corner where Ulysses S. Grant successfully captured two Confederate forts—Fort Henry and Fort Donelson. Fort Henry, on the Tennessee River, fell on February 4, 1862. Fort Donelson, on the Cumberland River, fell several days later on February 16. Following these defeats, the Confederate army in middle Tennessee withdrew from their headquarters in Nashville 30 miles south towards Murfreesboro, Tennessee. The Union Army occupied Nashville on February 24. In November 1862, Union Gen. William Rosecrans joined the army in Nashville in order to plan a major invasion south against the Confederate Army of Tennessee under the command of Gen. Braxton Bragg. The two armies met at the Battle of Stones River, northwest of Murfreesboro, between December 30, 1862,

and January 2, 1863. Both armies sustained numerous casualties in what was one of the bloodiest battles of the war.

With west and middle Tennessee firmly under Union control beyond Stones River, the Union commanders turned their attention to Chattanooga. According to Civil War historian, James McPherson “Chattanooga had great strategic value, for the only railroads linking the eastern and western parts of the Confederacy converged there in a gap carved through the Cumberland Mountains by the Tennessee River. Union forces could divide the eastern portion by penetrating into Georgia via Chattanooga.”²⁰ General Rosecrans moved his Army of the Cumberland south in June, turning the right flank of the Army of Tennessee and forcing General Bragg to retreat as far as Chattanooga. General Bragg entered the city on July 4.

The bulk of General Rosecrans’ Army of the Cumberland followed, and General Bragg withdrew from Chattanooga to position his army near Chickamauga Creek in north Georgia, where the two armies met again in a series of hard-fought battles on September 18, 19, and 20. The Confederates won the battle, but General Bragg allowed General Rosecrans’ forces to retreat into a defensive position inside the city of Chattanooga. The Confederate Army arrived in front of Chattanooga on September 22 and proceeded to lay siege, but Bragg lacked the men and artillery necessary to take the city. General Bragg developed a strategy to block all supply routes in and out of the city in an attempt to starve the Union army. Four supply routes connected Chattanooga to the Army of the Cumberland’s primary supply depot in Bridgeport, Alabama. The routes included the Tennessee River, the Nashville and Chattanooga Railroad, a wagon road along the railroad, and a circuitous wagon road that travelled over Walden’s Ridge before entering Chattanooga from the north.

20. James McPherson, *Battle Cry of Freedom: The Civil War Era* (Oxford: Oxford University Press, 1988), 670.

General Bragg determined that he could control the three most direct routes by securing Lookout Valley. Confederate forces under the command of Gen. James Longstreet occupied the valley forcing the Union to use the remaining, more difficult route through the mountains north of Chattanooga. To move between Lookout Valley and their position around the southern perimeter of Chattanooga, Confederate soldiers used two routes over the northern slope of Lookout Mountain. One route followed the Nashville and Chattanooga Railroad across the base of the mountain. The second route, a dirt road known as the Wauhatchie Pike, crossed the side of the mountain several hundred yards above the railroad. The Confederate Army also placed artillery, constructed earthworks, and established a signal station on Lookout Mountain to control Lookout Valley and prevent Union use of those supply routes.

Directly across the Tennessee River from the base of Lookout Mountain was the peninsula of land that the soldiers commonly called Moccasin Point, now known as Moccasin Bend.²¹ At the time, Moccasin Bend was largely undeveloped. A few farmsteads occupied the level areas where farmers cultivated the most fertile soil along the banks of the river. A few roads crossed the peninsula connecting fords and ferries. A dense hardwood forest covered the steep slopes of Stringers Ridge that extended along the spine of the peninsula towards its southernmost point.

Federal officers realized that the southern point of Moccasin Bend offered a strategic site from which artillery could protect the right flank of the Union army from attack across the Tennessee River. The Union commanders ordered the First Brigade of the First Division of the Army of the Cumberland’s Reserve Corps, led by Brig. Gen. Walter C. Whitaker, to “occupy heights opposite the Point of

21. Moccasin Point is the term used for the land on the peninsula. Moccasin Bend refers to the bend in the river. For consistency with modern usage, this report uses “Moccasin Bend” for the land on the peninsula.

Lookout Mountain.”²² The troops arrived on the peninsula on September 22, 1863. The occupying brigade included troops from the 96th Illinois Infantry, 84th Indiana Infantry and 40th Ohio Infantry, 10th Indiana Light Artillery Battery and 18th Ohio Light Artillery Battery. The army constructed a network of carefully designed artillery batteries along a series of knolls towards the southern end of Stringers Ridge. Some troops referred to their camp and battery as Fort Whitaker or Fort Moccasin Point.

On September 24, 1863, Whitaker reported to headquarters, “The troops of my command are now distributed as follows, viz. three companies upon the hill on the left of the main road, and about three fourths of a mile from the pontoon bridge. The Ninety-sixth Illinois Volunteers, and the Eighty-fourth Indiana, and Tenth Indiana Battery, Fortieth Ohio Volunteers, and one section Ohio Battery are directly opposite the base of Lookout Mountain. . . . The One hundred and fifteenth Illinois Volunteers, one section of the Eighteenth Ohio Battery at Brown’s ferry, about 3 miles below the position of Col. Champion.”²³

The Union soldiers came under fire from artillery located on Lookout Mountain. Officers on Moccasin Point wrote to their superiors requesting support and reported on the need to construct defensive fortifications. In response, Union commanders sent the 33rd Michigan Infantry on September 25 to assist other troops on the ground in the construction of earthworks. Charles Partridge of the 96th Illinois Infantry recalled “the Ninety-Sixth on one occasion working an entire night with picks and shovels.”²⁴

22. White Star Consulting, “Preservation and Interpretation Plan For Civil War Resources Located At Moccasin Bend National Historic Landmark, Chattanooga, Tennessee” (Mount Pleasant, TN: White Star Consulting, 1988), 25. The White Star Report is quoting Charles Partridge’s *History of the Ninety-Sixth Regiment, Illinois Volunteer Infantry* (Chicago, Illinois: Brown, Pettibone & Company, Printers, 1887).

23. White Star, 25.

24. Ibid.

The 96th Illinois regimental history includes an account of this period. A soldier wrote that “While on Moccasin Point, forage and rations were so scarce that all sutler’s trains and officer’s horses were ordered to the rear; but the order was not strictly complied with. One horse, belonging to an officer in the Ninety-Sixth, was secreted in an old building near camp, and subsisted for a time upon very scanty fare. The Rebel shell annoyed the camps and the men sought to protect themselves by building bomb-proofs. In looking about for material some of the members of Company G visited this hovel one night, and concluded that the heavy hardwood plank of which the floor was made would serve a good purpose as a covering, and accordingly took them up and bore them to camp.”²⁵ Apparently, some of the regiments constructed wooden quarters because later that fall Lieutenant Edwin W. Payne of the 34th Illinois Infantry described Fort Whitaker as having “fixed up log cabins which had been built by some other Regt and are now in the best Quarters we ever had.”²⁶

As the siege continued, Union commanders recognized they could harass Confederate troops on Lookout Mountain with their artillery. This situation enabled the Confederate troops to prevent Rebel troops from using the roads and the railroad across the side of Lookout Mountain. On October 5, 1863, Moccasin Bend artillery fired on Confederate positions, with both the 10th Indiana Battery and the 18th Ohio Battery participating. A Confederate soldier wrote that October about their effectiveness. “There are but two ways by which we can send reinforcement to the scene of the action (Lookout Valley): one by a tedious and circuitous route to the left; the other around the north end of Lookout, where they would be exposed to the fire of the Moccasin batteries. These batteries have been shelling Lookout, and our lines in that direction all day. They destroyed the halfway house (Mr. Cravens’) last week, and have since driven our signal corps from Lookout point. Their guns,

25. Ibid., 31.

26. Ibid.

though situated far below and on the other side of the Tennessee, carry to the very top of the Lookout Mountain. They opened fire very unexpectedly at one o'clock night before last. . . ."²⁷

Robert Cravens' house was a prominent two-story white frame house built in a clearing on the side of Lookout Mountain. The house and any troops that appeared in the open area around the house became targets for the federal guns. Brigadier General Whitaker reported on October 9, "The white house [Cravens] is in easy range. . . . From Capt. Naylor's guns, Lieut. Cox commanding, the enemy's camp can be easily shelled; they are in easy range. . . . I had 2 shells burst right among them. This part of the camp is just where the road coming off Lookout Mountain makes the turn to come into Chattanooga. With a larger gun I can make there stay very unpleasant anywhere in front. It is only twelve seconds from the flash to the south of the report from their big gun at the foot of the hill. . . . Several shots were fired at the white house; I think it was struck twice. It is a kind of palatial resort for rebels. They have been seen around thick until our shells made it rather hazardous for comfort. Aleshire has the signal station on Lookout under range. Yesterday his third shot gave a double-quick impetus to what was left of the signal party. To-day his second shot imparted similar action. Both shells were percussion and exploded directly on the point. This was done at a 6-degree elevation."²⁸

October 17, 1863, Brigadier General Whitaker reported a Confederate camp near Brown's Tavern. The 18th Ohio occupied a position at the northwest corner of Fort Whitaker that could cover that area of the opposite riverbank. By the end of the month, another battery, possibly under the command of Major Mendenhall, was in position opposite the first hill south of the gap in the ridge east of Brown's Tavern. This battery was in position to cover Union troops when they, toward the end of October, attacked Brown's Tavern. By

October 20, the Federal army had established a signal station between "Fort Whitaker, a point on the opposite side of the river directly opposite the point of Lookout Mountain and Cameron Hill."²⁹

The Confederate siege affected Union troops that lived on reduced rations. The army sent the horses and mules from Moccasin Bend to search for fodder. Some troops reported scavenging beans and corn in abandoned farm fields. Faced with a worsening situation, Union commanders in Washington, D.C., sent Maj. Gen. Joseph Hooker with the XI and XII Army Corps of the Army of the Potomac to support Rosecrans in Chattanooga. The reinforcements began arriving in middle Tennessee in early October 1863. They elevated Maj. Gen. Ulysses S. Grant to command the newly created Military District of Mississippi, which included Chattanooga. In one of his first actions, Major General Grant relieved General Rosecrans and placed Maj. Gen. George H. Thomas in command of the Army of the Cumberland. He also ordered Maj. Gen. William T. Sherman to march the Army of Tennessee toward Chattanooga to support Major General Thomas.

On October 27, under orders from Major General Grant, Brig. General William B. Hazen's Brigade seized Brown's Ferry by floating down the river in pontoon boats under the cover of night to attack the unsuspecting Confederate troops occupying that side of the river. Because the batteries on Moccasin Bend kept the Confederates away from the base of the mountain, they passed undetected until they arrived at Brown's Ferry on the opposite bank. Concurrently, troops marched into position opposite Brown's Ferry and built a pontoon bridge across the river. At the same time, Major General Hooker marched east from Bridgeport, clearing Confederates from Lookout Valley and securing use of the railroad. To limit Confederate reinforcements from entering Lookout Valley, Brigadier

27. *Ibid.*, 32.

28. *Ibid.* 33-34.

29. *Ibid.* 41.

General Whitaker's artillery shelled any sign of Confederate movement across Lookout Mountain.

General Bragg ordered General Longstreet to counter-attack Major General Hooker and to take back Lookout Valley because it was critical to his strategy of starving the Union army. Longstreet ordered a night attack using two divisions under Maj. Gen. Lafayette McLaws and Gen. Micah Jenkins. General Jenkins' South Carolina Brigade under command of Col. John Bratton attacked Union Brig. Gen. White Geary's division. Brigadier General Geary repulsed Colonel Bratton, which caused a strategic defeat for the Confederates. By October 31, the supply route known as the "Cracker Supply Line" was open and much needed goods began flowing into Chattanooga.

By November 1863, the Union army had positioned 12 guns at Moccasin Bend. Sometime before November 23, Major General Grant added two 20-pounder Parrot rifles to the battery. On November 24, Major General Grant ordered a two-front attack on General Bragg's line. Major General Hooker attacked General Bragg's left on Lookout Mountain while Major General Sherman crossed the Tennessee and attacked General Bragg's right. Major General Thomas' troops occupied the middle of General Bragg's line along Missionary Ridge to prevent General Bragg from moving troops.

On November 24, 1863, the weather was foggy and heavy mist shrouded Lookout Mountain. At daybreak, the guns on Moccasin Bend opened up a heavy fire on Confederate troops on Lookout Mountain. Major General Hooker's troops moved into position up the slope of Lookout Mountain, formed a battle line, and marched north, sweeping the unsuspecting Confederate forces back

toward the Cravens House. The Moccasin Bend battery continued their bombardment to prevent the retreating Confederates from reforming their battle line and from sending reinforcements into the battle. By the end of the day, Lookout Mountain was in Union control.

With the Union victories on Lookout Mountain and in Lookout Valley, the Moccasin Bend artillery no longer had a target or mission. A small number of troops may have periodically stayed on Moccasin Bend, but it no longer functioned as an encampment or battery. When the army marched toward Atlanta under Major General Sherman, they constructed a large number of support buildings in Chattanooga. The intense wartime activities in the Chattanooga area had denuded much of the forested areas of their timber. However, much of the forest at Moccasin Bend remained intact. To construct warehouses, depots, railroad repair buildings, and hospitals, the army needed building supplies so they sent soldiers to Moccasin Bend to set up at least one portable sawmill. This sawmill operated until spring 1864.³⁰

The "United States Coast Survey Map of Lookout Valley" by J. W. Dunn provides a detailed illustration of conditions in 1863, including the road network. This map shows a road located in the middle of the peninsula at the base of Stringers Ridge. The road ends almost at the southern end of the tip of the Bend. Another road crosses the middle of the Bend, passing from Brown's Ferry on the west through the gaps in Stringers Ridge. According to the map, trees cover the Stringers Ridge. The edge of the Bend, along the southern and western banks, appears to be open (figure 2.9). This is also the condition seen in photographs of the Bend taken during this period. With the exception of Stringers Ridge, pasture and fields occupy the low lands (figure 2.10).

30. *Ibid.*, 58-59.

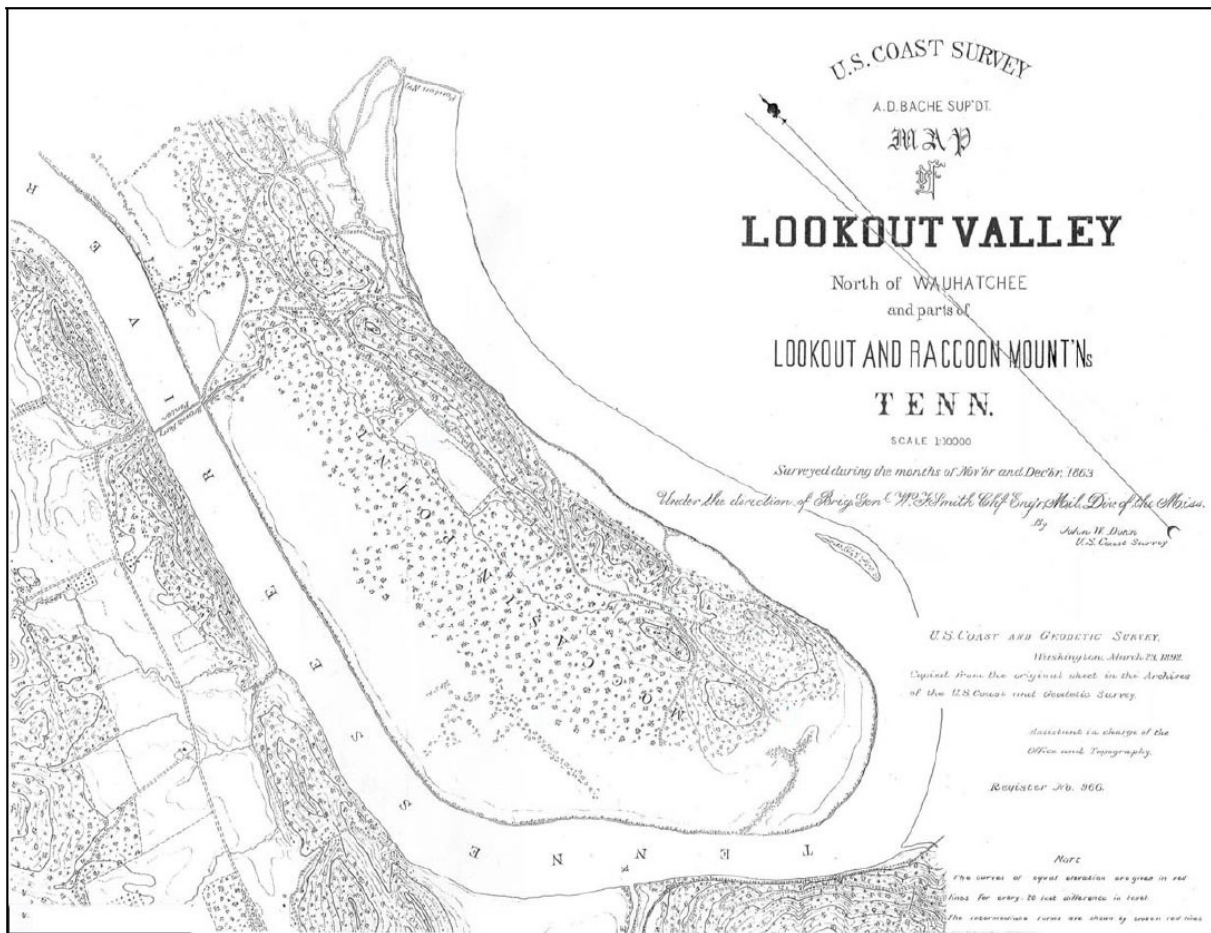


Figure 2.9: 1863 Navigation Chart (Alexander)

POST-CIVIL WAR 19TH CENTURY AND EARLY 20TH CENTURY (1866–1925)

At the end of the war, because of the Union occupation of the area, most of the farmers and landowners had left the Bend. In the spring of 1865, dislocated farmers presumably returned to their property and reclaimed their farms. In the decades after the war, limited settlement concentrated along the road west of Stringers Ridge. Photographs from Lookout Mountain show a few isolated structures on the edge of the Pleistocene terrace³¹ and structures on the west perimeter of Stringers Ridge near the road (figure 2.12 and figure 2.13). During the 1860s, much of the level area

31. The “Pleistocene terrace” and “Dredge fill” areas are referred to in much of the archeological research associated with Moccasin Bend. This area and other geomorphologic designations are illustrated by Alexander in his report. See figure 2.11.



Figure 2.10: “From Lookout Mountain 1864”, (CHCBL, #00002935)

of the Bend was open and under cultivation. Trees were visible on the Pleistocene terrace and in the overflow channel that cut across the heel of Moccasin Bend (figure 2.14).

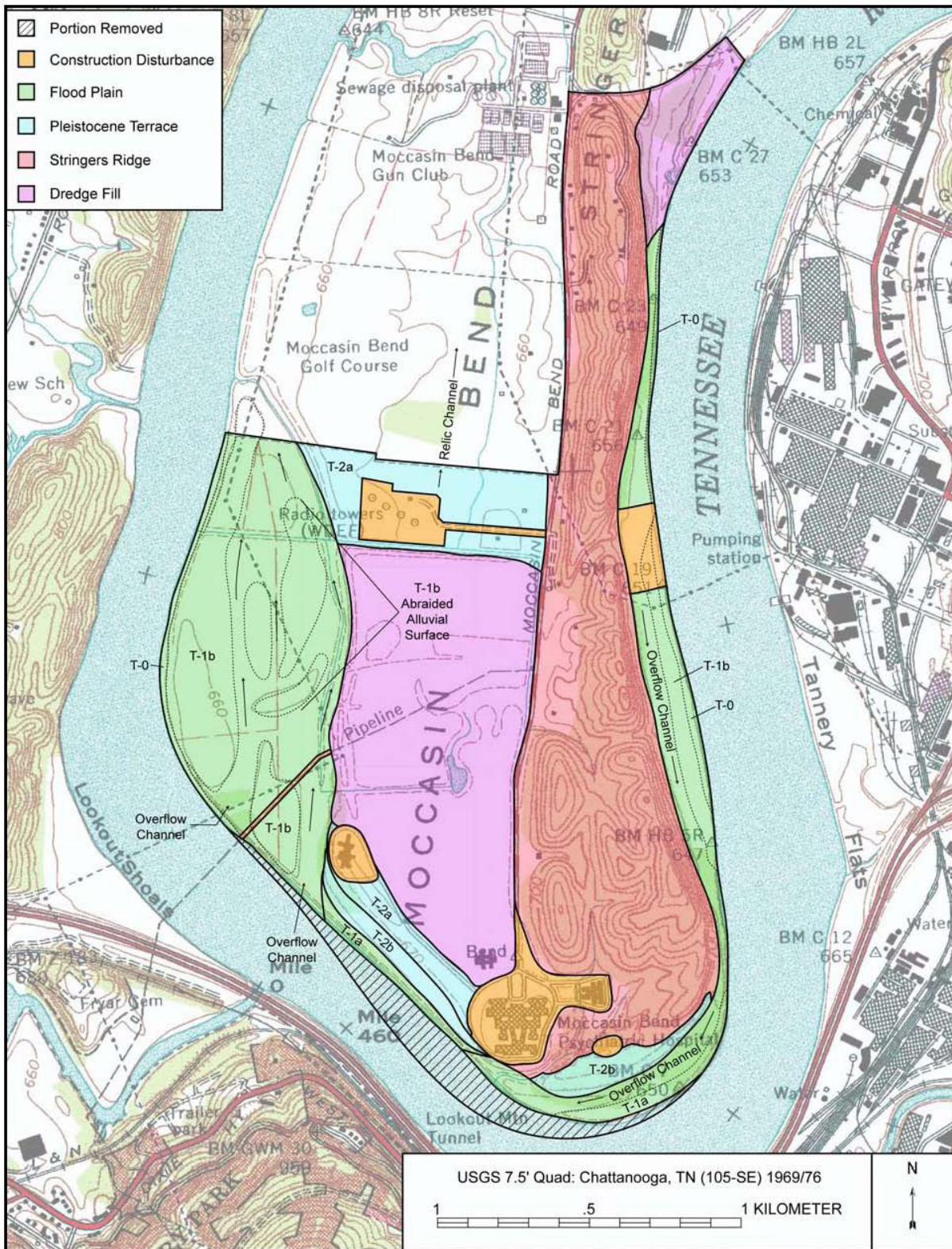


Figure 2.11: Moccasin Bend geomorphological areas (Alexander, 96).



Figure 2.12: View of Chattanooga and Moccasin Bend from Lookout Mountain, ca. 1863 (CHCBL, #00001009)

In the decades following the war, land on Moccasin Bend changed hands several times as farmers and speculators subdivided and sold the farms. The dominant land use remained active agricultural. After the war, Jerome Summerman owned most of the land on the west side of the Bend near its southern tip. He remained the primary owner as late as 1878. Sievers Adams also owned a large portion of the Bend as late as 1883 when he had sold much of this land to H. H. Hampton. Hampton also bought Summerman's property, becoming the largest landowner on the southern half of Moccasin Bend at the end of the 19th century. Other, smaller tracts of land also changed hands several times. Chattanooga Estates Company consolidated several parcels toward the end of the 19th century. Frederic T. Hampton and J. T. Hampton also bought tracts.

In 1898, plans promoted industrial development on Moccasin Bend. One plan proposed constructing a canal across the Bend to facilitate boat and barge traffic. The federal government determined the plan was too expensive and rejected the proposal. A postcard from 1907 shows Moccasin Bend viewed from Lookout Mountain. Most of the Moccasin Bend was clear of tree cover except for the forested southeastern edge of Stringers Ridge. Even the overflow channel that cut across the heel of the Moccasin appeared

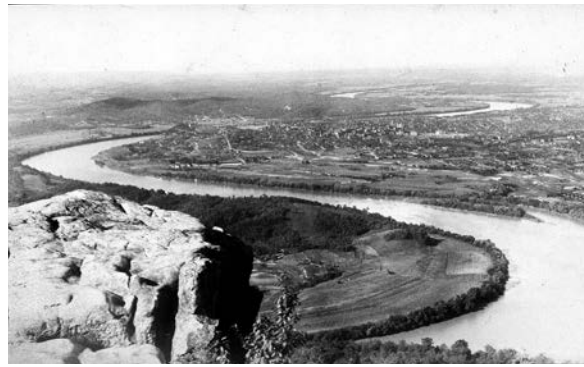


Figure 2.13: View from Point Lookout, Lookout Mountain showing Moccasin Bend, the Tennessee River and the city of Chattanooga, ca. 1886 (CHCBL, # 00005629)

mostly cleared of timber. Buildings appeared in the open area south of Stringers Ridge (figure 2.15). Another postcard from 1907 looking at Lookout Mountain gives a view of Moccasin Bend in the foreground. A red roofed house was visible on Stringers Ridge. The open fields were fenced pastures and trees grew along some of the fence lines (figure 2.16).

A visible line of trees grew along the river's edge in a ca. 1909 photograph of Moccasin Bend. Stringers Ridge appeared mostly wooded except for the most southern end, which was under cultivation (figure 2.17). In 1915, C. B. Moore, working for the Philadelphia Museum of Natural History, visited Moccasin Bend as part of his archeological investigations of the southeastern United States. Moore undertook the first documented archeological digs at Moccasin Bend in 1913 and 1914. He published a report on his work in 1915. He excavated 31 burial sites on Walter T. Hampton's property and investigated five mounds that are part of the Woodland Mound Complex (40HA130, 40HA142, 40HA143, 40HA144, 40HA145, 40HA146). He also purchased several prehistoric artifacts collected from the Bend that remained in private collections.



Figure 2.14: View from the top of Lookout Mountain, Tennessee, February, 1864 (Library of Congress Prints and Photographs Division Washington, D.C., Reproduction #LC-USZ62-98802)



Figure 2.15: 1907 Postcard showing Moccasin Bend (CHCBL, #00005669)



Figure 2.16: Lookout Mountain in 1907, view from Moccasin Bend (Alexander, 62 from CHCBL Collection)



Figure 2.17: Moccasin Bend, ca. 1909 illustrating cleared and cultivated areas (Alexander, 61, from CHCBL Collection)

EARLY PRESERVATION EFFORTS IN 20TH CENTURY (1926–1960)

In 1926, the town of Lookout Mountain petitioned Chattanooga’s City Commission to request that the city purchase Moccasin Bend to be “as a park and pleasure resort for all the people of Chattanooga and Hamilton County.” This was the first documented effort to create a park on Moccasin Bend. Despite local interest throughout the next decade, the city never acted on any petitions or persuasions to

create a park, and many local politicians and business leaders favored proposals to develop the Bend into an industrial park. The push for creating a park quieted during the Great Depression and World War II.

In May 1944, Chattanooga Chamber of Commerce officers Z. Carter Patten and Cecil Woods formed a non-profit organization called the Moccasin Bend Memorial Park Association to promote a park on the Bend dedicated to members of the armed forces.

They gained the support and assurances for financial aid from Tennessee Governor Prentice Cooper. In July 1944, the Moccasin Bend Memorial Park Association got an option on a 300-acre tract on the middle of the Bend from the Chattanooga Estates Company. The parcel was part of the Brown Reservation, but the option remained unexercised.

The *Chattanooga Times* on May 1944 editorialized that the city needed to expand park facilities and Moccasin Bend was an ideal location. They praised the efforts of Cartter Patten, chair of the Chamber of Commerce Forestry Committee, to create the memorial park. According to the editors, “it is not for The Times to go into panegyrics about the beauty of Moccasin Bend or its unmatched setting. . . . One can picture playgrounds on the Bend or a municipal golf course unmatched anywhere in the world for the beauty of surroundings.” In December 1944, the *Chattanooga Free Press* reported the Moccasin Bend Memorial Association promised to raise \$250,000 to acquire land for the park. While trying to raise the money, the Moccasin Bend Memorial Association also attempted, with limited success, to stop development on the Bend. They tried to get property rezoned to prevent industrial development and to convince property owners not to sell to developers. The *Chattanooga Times* reported in December 1948 that owners of property on Moccasin Bend considered an agreement not to sell their property for a year. Aubry Folts, vice president of Chattanooga Estates, and James N. Pearson Jr., a Moccasin Bend landowner, informed the city council they were willing to give the chamber of commerce and other groups’ time to develop plans for the park. The paper reported, “Lookout Mountain citizens fear that industries may be established in the area, spoiling the view from Point Park with smoke and unsightly plants.”³²

In 1947, a section of Stringers Ridge, south of Hamm Road, was subdivided and several residences were constructed. Hamilton

32. “Agreement Not to Sell to Industry for Year is Hoped at Moccasin Bend,” *Chattanooga Times*, December 8, 1949.

County also built structures as part of their shooting range complex. In January 1950, a delegation of city and county leaders traveled to Nashville to revive the earlier efforts for a veterans’ memorial park at Moccasin Bend. They proposed the city and county buy the land and turn it over to the National Park Service (NPS) to manage. Tennessee Senator Estes Kefauver and NPS officials showed interest. The city estimated the cost to be \$250,000 to secure 1,200 acres. The Chamber of Commerce Recreation and Forestry Committee recommended a zoning change from rural to agricultural to prevent industrialization from occurring while they acquired land. A 1950 list of property owners on Moccasin Bend shows 23 parcels totaling 1,244.22 acres. Chattanooga Estates Company, for example, had six parcels totaling 276 acres. H. H. Hampton held the greatest ownership—two parcels that combined 546 acres. James H. Pearman owned a 134-acre tract. The average land value was \$76 per acre.

U.S. House of Representatives Committee on Public Lands approved House Bill 7675 authorizing the expansion of Chickamauga Chattanooga National Military Park by up to 1,400 acres. The Department of the Interior could only receive the land as a donation. According to the Secretary of the Interior, “acquisition of the land would cost the government nothing and the expense of maintaining the area would be nominal.”³³ The *Chattanooga Times* reported on January 15, 1953 that Governor Browning signed a law allowing the city of Chattanooga to amend its city charter in order to purchase the land for the park. Governor Browning also appropriated \$100,000 of state funds for land acquisition.

On January 16, 1952, Governor Browning’s last day in office, he was supposed to deliver the \$100,000 check to Lou Williams, one of the leading proponents of the Moccasin Bend memorial park. The incoming governor, Frank Clement, instructed Attorney General Harry

33. “Park for Moccasin Bend Assured as Bill is Signed,” *Chattanooga Times*, March 17, 1951.

Beeler to block the transaction. The governor stated that it was not in the public interest and that he “would be happy to talk with interested officials,” but he never did.³⁴

In December 1954, park supporters met with state Sen. Ben Cast to try to obtain the \$100,000 of previously approved funds.³⁵ A few months later, during March 1955, the state legislature cut the funds from the budget, effectively killing the project.³⁶

During the early 1950s, the Hampton family still owned most of the land on the Bend. In 1954, the Hampton heirs sold their land to Anne L. Carter. In 1958, Mrs. Carter owned 890.79 acres on the Bend, including the entire southern third of the peninsula. Other owners included Fred Fine (78.35 acres); radio station WDEF (18.62 acres); William Wells (95.9 acres), and the city of Chattanooga, owner of the 93-acre Moccasin Bend Sewer Treatment Plant, constructed in 1976.

Herbert Clay Kirk owned 80 acres on the north end of Moccasin Bend. In October, county officials rezoned his property permitting him to construct a racetrack. Kirk opened the Moccasin Bend Speedway, a quarter-mile track, in spring 1954. Kirk held races in 1954, 1955, and 1956, but the speedway does not appear in the 1957 city directory.³⁷

The clash between the backers of the park and backers of industrial development continued through the 1950s. In July 1957, a commission looking for suitable locations for a new state mental hospital released a study that included Moccasin Bend. The

Chattanooga Chamber of Commerce Health and Sanitation Committee applauded the possibility, and they recommended the city acquire the site and give it to the state as an incentive for locating the new facility in the area. The Chamber of Commerce Industrial Committee of 100 was vociferous in their opposition. The *Chattanooga Times* reported in July 1957 “Business and industrial leaders in Chattanooga. . . insisted that Moccasin Bend offers some of the best industrial sites in the Chattanooga area.”³⁸ Business leaders met with state officials to make it clear that “they prefer developing the area for industrial use.”³⁹ Editors of the *Chattanooga Times* opined, “People now realize that a hospital would be much preferable to industrial plants on the beautiful Bend. . . . There is room for a hospital and park development of the remainder or for leaving the remainder as it has been for a century.”⁴⁰

In October 1957, the Industrial Committee of 100 resurrected early proposals to construct a freeway and a channel across the Bend to provide the transportation needed to support new manufacturing facilities.⁴¹ A new group, called the Moccasin Bend Association, formed in October 1957 to campaign on behalf of its preservation. The Chattanooga Council of Garden Clubs announced they too supported preserving the Bend.⁴² Members of the chamber of commerce, led by Cartter Patten, also came out against the proposal by the Industrial Committee of 100. The Industrialists did have their supporters, including the Chattanooga Labor Council, which voted in favor of “Moccasin Bend entirely for an industrial park.”⁴³ In November, some of

34. “Threat by Father of Clement Delays Moccasin Bend Check,” *Chattanooga Times*, January 16, 1952.

35. “Save Moccasin Bend,” *Chattanooga Times*, December 6, 1954.

36. “Veto Cuts Out \$100,000 Fund for New Park.” *Chattanooga Times*, March 22, 1955.

37. Harmon Jolley. “River City Racing – the Moccasin Bend Speedway,” accessed at <http://www.chattanoogan.com/2010/2/20/169388/River-City-Racing---the-Moccasin-Bend.aspx>

38. “Site for Hospital On Moccasin Bend Stirs Objections,” *Chattanooga Times*, July 26, 1957.

39. “Moccasin Bend Owner Prefers Industry Site,” *Chattanooga News Free Press*, July 26, 1957.

40. “Moccasin Bend,” *Chattanooga Times*, July 1957.

41. “Alternate Expressway Plan Would Route Boats in Channel Across Moccasin Bend,” *Chattanooga News Free Press*, October 5, 1957.

42. “Group is Formed to Maintain Bend,” *Chattanooga Times*, October 29, 1957.

43. *Ibid.*

those opposed to industrial development of the Bend saw the hospital plan as a chance to save a portion of the Bend while accommodating other uses. The *Chattanooga Times* summarized the three groups: “One group desires to use about 400 acres of Moccasin Bend’s some 1,600 acres for a state intensive treatment mental hospital. One group urges that nothing be done to mar the scenic beauty of famed Moccasin Bend as seen from Lookout Mountain, a vista unmatched anywhere. One group sees Moccasin Bend as the last remaining large area that can provide sites for industries that need river and rail transportation facilities.”⁴⁴ The editor encouraged a conciliatory solution where the city accommodated the hospital, parkland, and industrial use.

Mrs. Sim Perry Long, a long-time supporter of preserving the Bend, commissioned landscape architect Walter L. Chambers in conjunction with the firm Sasaki and Associates to prepare a plan for the proposed park. In December of 1957, Mrs. Long presented this plan to a 100-person committee. The plan illustrated the “Bend as a natural park rather than a site for industrial development. . . along general lines suggested by a number of Chattanoogaans who want to preserve the scenic value of the Moccasin.” The plan suggested either preserving the southern tip of the bend or using that location for “the proposed state mental hospital. Other proposed features included two small lakes, azalea garden, hiking trails, bridle paths, athletic fields, and a band shell for outdoor concerts.”⁴⁵

The *Chattanooga Times* reported that “owners of the land have expressed the feeling that the Bend should be put to whatever use is in the best interests of the majority of the people of this area. . . viewed from far away has long been one of Chattanooga’s scenic boasts. . . . A tour of the Bend itself, however, reveals that the

44. “A Plan for Moccasin Bend,” *Chattanooga Times*, November 14, 1957.

45. “Long-Range Bend Landscape Plan Would Exclude Plants, Add Lakes,” *Chattanooga Times*, December 10, 1957.

surface is hardly so picturesque. Aside from a pine-covered ridge, which has a certain scenic attraction, the bend is a muddy array of gullies and apparently not-so-choice farm land.”⁴⁶

A few weeks later, the Committee of Three, which included O.B. Keister Jr., Mrs. Z. Cartter Patten, and Lou Williams, submitted their “Report of the Committee of Three in Regards to the Development of Moccasin Bend.” They concluded that the Bend could accommodate multiple uses. They voiced support for the mental hospital, which would occupy approximately 400 acres. About 250 acres would be set aside as park and garden; and the remaining 550 acres could go toward “restricted industrial use.”⁴⁷

Not everyone supported the multiple uses. Chattanooga resident Alice Whitson Norton wrote the poem “A Vision From the Sky” that plead for preserving the Moccasin Bend:

Nowhere in this whole wide world
 But sunny Tennessee
 Is there another place on earth
 For human eyes to see,
 That can in any way compare
 With Nature’s beauty patterned there.
 The Indians trod upon this land
 In days so long gone by,
 They labeled it a moccasin
 The vision from the sky

46. “Industrial Park of Big Recreation Area? Moccasin Bend’s Development Stirs Controversy Among Chattanooga Leaders,” *Chattanooga Times*, January 15, 1958.

47. O.B. Keister, Jr., Mrs. Z. Cartter Patten, and Lou Williams, “Report of the Committee of Three In Regard to the Development of Moccasin Bend” (Chattanooga, TN, 1958).

Full conscious that this tract of land,
 Was not designed by human hand.
 From Point Lookout we see today
 Through mist and heat and rain and snow
 The picture that the Indians saw
 In beauty far below;
 And catch the eco of the song
 The River signs the whole day long.
 O City, with your growing pains,
 Touch not this matchless place;
 By hand or wheel or anything
 That might in time erase
 The joy it gives each passer by
 Who views this Vision from the Sky⁴⁸

The Moccasin Bend Association was also adamant. We “will oppose use of any part of the bend for industry, oppose construction of the navigation canal across the property and also oppose construction of the expressway over the alternate route which would carry it across the bend.” The association endorsed the concept of using a portion of the Bend for a hospital, however.⁴⁹

In March 1958, the boosters for industrial development presented a report prepared by James Sullivan, an engineer with Sullivan and Hoebel and a consultant with the state highway department. The report claimed that the most economical and feasible way to improve the

48. “Mrs. Norton Popular Song’s Author, Writes Poem On Bend,” *Chattanooga News Free Press*, February 6, 1958

49. “Bend Association is Given Charter,” *Chattanooga Times*, January 9, 1958.

transportation infrastructure in Chattanooga was to build a canal and highway across the Bend.”⁵⁰

Charles Dunn, the superintendent of Chickamauga and Chattanooga National Military Park, presented a memorandum to the NPS regional office outlining recent developments on Moccasin Bend. He said “The mental hospital, sewage disposal plant and substation are the only projects definitely constructed or planned for the area, and it is our opinion that these projects will have very little effect on our efforts to preserve the extraordinary view and setting from Point Park on Lookout Mountain. . . . It is, therefore, our recommendation that amendatory legislation be sought to authorize purchase by the United States of the remaining approximately 1,000 acres of land in the Bend as an addition to the park, since this seems to be the only solution for preserving its scenic beauty instead of just another site for industrial development.” In May 1959, the NPS regional director responded negatively to Dunn’s recommendations. “After reviewing these facts it has been concluded that the National Park Service can no longer support the proposal initiated in 1950 to acquire Moccasin Bend for addition to” the Chickamauga Chattanooga National Military Park. “The introduction of alien uses in the vital foreground zone seriously interferes with the original purpose of the proposed addition.” The regional director seemed to value only the scenic and recreational value of the undeveloped land between the mental hospital and sewage treatment plant. He made no mention of archeological resources and suggested that Superintendent Dunn encourage city and county officials to pursue the property for their own use.⁵¹

Local preservationists continued their campaign to preserve Moccasin Bend, despite the government’s reluctance to own the

50. “View of Engineer,” *Chattanooga Times*, 13 March 1958.

51. Dunn to Regional Director, March 18, 1959, copy in NMP Archives.

property. Mrs. Cartter Patten made “an appeal to the County Council against the rezoning of Moccasin Bend to allow for industrial use.” She argued that, in addition to the historic and scenic value of the Bend, the periodic flooding of the Bend made it an inappropriate site for industry. Other preservationists continued to push NPS officials to consider their earlier commitment to accept land on the Bend. In March 1960, during a meeting Mrs. Sim Perry Long asked NPS staff to “consider the possibility of making Moccasin Bend part of the Chickamauga Chattanooga National Military Park. This area is of national significance for its scenic values as associated with Lookout Mountain and for its historic importance.” NPS Regional Director Elbert Cox countered, “Modern intrusions have entered the scene” and diminished its significance for federal ownership.⁵²

The *Chattanooga Times* announced in December 1960 the end to the 25-year controversy over Moccasin Bend. Mr. and Mrs. Paul Carter gave 261 acres and sold 261 acres to Chattanooga and Hamilton County on which to build the proposed mental health hospital. With this transaction, the vast majority of land, approximately 980 acres, on Moccasin Bend was under public control. Only 168 acres remained in private ownership.⁵³

An aerial photograph of Moccasin Bend from 1957 documented its condition at the end of this period (figure 2.18). The land west of Moccasin Bend Road was mostly clear of vegetation and divided into cultivated fields. A narrow line of trees grew along the drainage slough that cut across the heel of the foot of the Bend. Another narrow line of trees grew along the shore edge. Several houses are visible in the photograph. Most were near Moccasin Bend Road. The photograph also shows the

52. “Special Meeting of Moccasin Bend Association and Interested Parties,” June 16, 1960, copy in NMP Archives

53. “25 Year Moccasin Bend Dispute Ended with Carters’ Gift-Sale of 522 Acres,” *Chattanooga News Free Press*, December 30, 1960.



Figure 2.18: 1957 aerial of study area (Alexander, 66)

Moccasin Bend Speedway and its large road and parking network. Stringers Ridge was forest at this time except for a few open areas associated with residences.

LATER PRESERVATION EFFORTS IN 20TH CENTURY (1961–1993)

Dr. Joseph Johnson was the Commissioner of Mental Health of the state of Tennessee in the 1950s. He was an early supporter of locating the hospital in Chattanooga. Even prior to selecting Moccasin Bend as its location, in March 1958, state officials instructed Mario Bianculli, a Chattanooga architect, to prepare drawings for the new mental hospital. The architectural drawings remained incomplete until the final site was chosen.⁵⁴ Dr. Johnson was interested in archeology and was familiar with Moore’s early archeological investigation

54. “Architects Speed Work on Hospital,” *Chattanooga Times*, March 13, 1958.

of Moccasin Bend. Thompson and Street Company, from Charlotte, North Carolina, received the contract to build the facility.⁵⁵ The hospital was complete by 1961 (figure 2.19).

In May 1961, the Moccasin Bend Association continued their campaign to involve NPS officials. They pledged to assist the effort to purchase land on the Bend. In a letter to Secretary of the Interior Stewart Udall, they outlined the recent efforts of industrialists to revive plans to develop an industrial park and reiterated the historic and scenic significance of the site. "The scenery along the Tennessee is unsurpassed. . . Moccasin Bend. . . was recently endangered by a proposed channel cut-through, a Federal Highway and industrialization."⁵⁶ In June, local officials placed a Civil War commemorative marker on Moccasin Bend Road dedicated to "the brave men of both the North and South who gave their lives here."⁵⁷

Despite local concerns about environmental and preservation impacts, a plan to construct the new interstate around the base of Lookout Mountain required the removal of a large amount of soil from the north side of the river to fill along the south bank of the river to preserve the width of the channel. John Cook, the new park superintendent, disowned the issue and denigrated the efforts of Mrs. Sim Perry Long and likeminded preservationists. "As has been mentioned time and again, Moccasin Bend has long since lost its historical significance and part of its natural beauty as a result of modern developments. Therefore, how the remaining area is used is a local problem, and should be none of our concern. . . Moccasin Bend at this stage of the game should not cause concern to either the Department or the Service, despite the loud objections from just a handful of citizens."⁵⁸

55. "Contract Is Given For Construction of Bend Hospital," *Chattanooga Times*, May 26, 1959.

56. Moccasin Bend Association to Stewart Udall, May 27, 1961, copy in NMP Archives.

57. Moccasin Bend Dedicated as Beauty Spot Forever," *Chattanooga Times*, June 23, 1961.

58. John Cook to Charles Jeffers, August 29, 1963, copy in NMP Archives.

In January 1964, Baner Dredging Company from Texas received the contract to cut a strip along the southern edge of Moccasin Bend. The dredging company pumped the dirt and piled it at an area slated to become the site of the Chattanooga State Technical College.⁵⁹ A report that February estimated that 2.7 million cubic yards of soil was to be moved.⁶⁰ Local residents contacted Dr. Guthe, head of the University of Tennessee Anthropology Department, to alert him of American Indian artifacts imperiled by the dredging project. Professor J. B. Graham, with the University of Tennessee, received permission to perform archeological investigations at the construction area. His work, summarized in a report "The Archeological Investigation of Moccasin Bend, Hamilton County, Tennessee," claims that recovered evidence shows "without a doubt that Indians lived there over a span of several thousand years."⁶¹ Investigators found remains of structures, bones, tools, pottery, and burials (40HA63). The University of Tennessee obtained the recovered artifacts.

Mrs. Long continued to press the National Park Service to consider the historic significance of the Bend and campaigned for its preservation based on its archeological significance, even sending the NPS officials a map locating potential archeological sites. Again, the National Park Service was unwilling to acknowledge the legitimacy of her argument. In August 1964, Superintendent Cook wrote to Mrs. Long. "I do not know if the archeological interest of Moccasin Bend is of national significance. . . It seems to me that this area would make an interesting County and City Park."⁶²

Other residents also lamented the dredging project. Mrs. Bradley Currey wrote to the

59. "Moccasin Bend To Be Searched For Indian Data," *Chattanooga Times*, January 27, 1964.

60. "Giant Dredge Ready to Move 2.7 Million Yards of Earth At Bend," *Chattanooga Times*, February 27, 1964.

61. "Indians' Homes On Bend For Thousands Of Years," *Chattanooga Times*, February 14, 1965.

62. John Cook to Mrs. Sim Perry Long, August 19, 1964, copy in NMP Archives.



Figure 2.19: View of Moccasin Bend and Mental Health Facility under construction (CHCH Archives)

editor of the *Chattanooga Times* about “seeing the slow death of the matchless beauty of our great heritage, Moccasin bend.” She compared it to a “feeling of sickening reality on . . . seeing a loved one dying slowly, with beauty vanishing before your eyes.”⁶³ Again, Superintendent Cook discounted the preservationists’ position. He wrote the regional director about the dredging that “concerned Mrs. Sins [sic] Perry Long and associates so badly a few months ago.” He opined that “the ‘moccasin’ will loose [sic] very little of its appearance, despite the fact that some 400 feet of ‘sole’ are to be removed from its ‘foot.’”⁶⁴

Landscape architects prepared a planting plan for the bank that included rows of willow and locust trees planted along the top edge bank and chicken wire seeded with grass stretched along the face of the bank. Within a year, the newly contoured bank along the Tennessee was failing in several locations. The state unsuccessfully tried to address the problem by installing large boulders to support the soil and building concrete ditches to redirect the natural flow of storm water. In August 1965, state highway officials announced they were

63. “The Bend Is Going,” *Chattanooga Times*, April 4, 1964.

64. John Cook to Regional Director, April 9, 1964, copy in NMP Archives.

installing 30,000 tons of riprap along the bank. Rossville Crushed Stone were the low bidders and received the contract for the job.⁶⁵

In January 1965, Chattanooga City Commission voted to construct a public golf course on 156 acres on the Bend and leased the property to Moccasin Bend Golf Club Inc. to build an 18-hole course.⁶⁶ In March 1966, Mrs. Sim Perry Long and the Moccasin Bend Association resumed their campaign to convince the NPS officials of Moccasin Bend’s historic significance. They pointed to several archeological studies that plainly confirmed the existence of American Indian resources. Mrs. Long wrote directly to the NPS Regional Director Elbert Cox, “we feel prompt action is imperative to help us in providing recognition and development of this landmark so rich in scenic, historic and archeological value.”⁶⁷

Cox shared the letter with Superintendent Cook. Cook acknowledged that Mrs. Long and the Moccasin Bend Association had not swayed his opinion. In fact, he wrote to Cox, Mrs. Long “has about given up on me. . . . Let’s hope it remains this way, for goodness knows we have no desire or need

65. “Wall Along Bend To Stem Erosion,” *Chattanooga Times*, August 14, 1965.

66. “Golf In The Bend Approved By City,” *Chattanooga Times*, January 2, 1965.

67. Mrs. Sim Perry Long to Elbert Cox, March 16, 1966, copy in NMP Archives.

for any acreage on Moccasin Bend.”⁶⁸ Cox, for his part, responded more respectfully and helpfully to Mrs. Long’s entreaties. He commended her on her persistent efforts to preserve Moccasin Bend, but reminded her of his earlier “conclusion that the direction of developments in and around Moccasin Bend suggest action by state or local government agencies to preserve open space or historic resources.” He did suggest, “Proposals concerning Moccasin Bend might qualify for consideration . . . through Land and Water Conservation Fund.”⁶⁹

Mrs. Long wrote back to Cox about Moccasin Bend Association’s attempts to purchase land on the Bend. In October 1968, the newspaper reported the local government was about to purchase the last public parcel on the Bend under consideration for industrial development. The city and county both contributed \$25,000. They received \$50,000 in federal funds from the Open Spaces Act, which required the land remain open to public use.⁷⁰

In the late 1970s, Chattanooga’s Junior Chamber of Commerce joined with the Greater Chattanooga Area Zoological Society to propose constructing a zoo on 300 acres on the park. It was part of a larger effort to create a tourist destination across the river from downtown Chattanooga. The Bend was under consideration for the future site for a new technical school, but the site, the spoil pile from the mid-1960s dredging project, was determined unstable for construction.

Genoco Oil Company encountered American Indian remains when digging a drainage ditch on their property in 1975. They contacted Jeffery Brown and Raymond Evans of the University of Tennessee at Chattanooga Institute of Archeology who investigated the

remains. Brown and Evans also supervised testing of an area where the city was expanding the Moccasin Bend Waste Water Treatment Plant in 1977 (40HA146). In an article about their work, Dr. Brown exclaimed, “the entire area about Moccasin Bend should be in the National Register of Historic Places.” Evans also noted that relic hunters were scavenging American Indian sites on Moccasin Bend. “There is extensive evidence of recent vandalism on the site. Several freshly dug holes, some to a depth of more than 6 feet, were discovered. Structural remains were present, and broken ceramics and human bone fragments littered the entire area’ . . . Evans and Brown brought this situation to the attention of local public officials and their action seems to have been successful in halting the vandalism for a time. We soon learned, however, that they simply shifted their area of activity to the northern portion of the site.”⁷¹

In the early 1980s, city and council officials continued to struggle with how to best utilize Moccasin Bend for the community. Representatives of preservation groups “urged that the area’s rich archeological and natural resources be preserved in any plan developed for the site.”⁷² In March 1981, architect Jim Franklin presented a plan to the Chattanooga Hamilton County Planning Commission that included a marina, housing, a zoo, sites for high technology industry, and areas for recreation. They commissioned the Urban Land Institute to study the Bend. The Urban Land Institute report, issued in 1982, recommended developing “multifaceted tourist park anchored by a zoo and offering such attractions as a recreated Indian village, outdoor amphitheater and marina.”⁷³ Supporters of industry responded with a

68. John Cook to Regional Director, March 28, 1966, copy in NMP Archives.

69. Elbert Cox to Mrs. Sim Perry Long, March 24, 1966, copy in NMP Archives.

70. “Bend Land Bought For Park Purpose,” *Chattanooga Times*, October 23, 1968.

71. “University Team Digs for Indian Relics on Bend,” *Chattanooga Times*, June 25, 1975.

72. “Multi-Use Concept Suggested For Moccasin Bend Tract,” *Chattanooga Times*, March 18, 1981.

73. Urban Land Institute, “Moccasin Bend Chattanooga, Tennessee: An Evaluation of Land Use and Development Strategies for the Chattanooga-Hamilton County Regional Planning Commission, (Washington, D.C.: ULI, 1982).

survey allegedly showing that a majority of Chattanooga residents supported industrial development of Moccasin Bend.⁷⁴

The city and county governments teamed with the Lyndhurst Foundation in 1982 to create the Moccasin Bend Task Force (MBTF). They charged the task force with leading “the community in an inclusive planning process to outline future development plans for the 22-mile river corridor between the Chickamauga Dam and the Marion County line.” The *Chattanooga Times Free Press* reported in August 1982 that the representatives from the Cherokee Indian Nation expressed concerns about the impetus toward development. MBTF members contracted with the Chattanooga Regional Anthropological Association (CRAA) to conduct an archeological and historic assessment of cultural resources on the Bend. The three-phase project included archeological testing, nominating the site to the National Register of Historic Places (NRHP), and development of a management plan to protect historic resources. Their first progress report from phase one describes the activity of relic hunters. In November, they had installed “no trespassing signs” and engaged the hospital security to assist monitoring the site.⁷⁵

The *Chattanooga Times* reported in January 1983 on a meeting between MBTF and CRAA representatives. Each group wanted a voice in the direction of the peninsula. The paper stated that “Immediate assessment of the historic value of the bend became clear late in December when ten archeologists spent the weekend there excavating a 400-year-old American Indian dwelling.” Dr. Major McCollough, coordinator of the archeological excavation, said that the area “has major archeological value” and contains buried

74. “Most Chattanooga residents Favor Industry for Moccasin Bend Peninsula,” *Chattanooga Times*, August 19, 1982.

75. Chattanooga Regional Anthropological Association, “Proposal for Archeological/Historic Assessment of Cultural Resources on Moccasin Bend, Hamilton County, Tennessee,” (Chattanooga: CRAA, 1982).

remains of a large Indian town (40HA130 through 40HA147, 40HA394, 40HA395).⁷⁶ CRAA members released conceptual drawings illustrating how the village may have looked (figure 2.20). CRAA representatives also reiterated the importance of protecting the site from relic hunters. McCollough reported that people had robbed hundreds of graves in the previous decade.⁷⁷ McCollough explained, “the importance of finds along Moccasin Bend has been known for years. There have been repeated attempts to halt vandalism in the area. There has also been much talk regarding developing the area; some are ready to destroy what is there. I took it as my professional responsibility to find what its value is and what its best uses would be.”⁷⁸ McCollough estimated 1,100 to 1,200 holes dug by vandals. In August 1983, the *Chattanooga Times* reported on a project to protect the American Indian archeological sites from tree-root damage. The Tennessee Department of Conservation awarded Chattanooga \$14,000 from the Jobs Bill to hire workers to clear trees and underbrush from the site.⁷⁹ CRAA members also were able to protect American Indian sites when the Chattanooga Electric Power Board replaced steel transmission towers. CRAA representatives monitored the construction and got the contractor to shift some of the footing to minimize damage to archeological sites.

In September 1983, MBTF representatives announced at a public meeting they preferred a tourism-based development plan for Moccasin Bend. They told attendees they engaged CRAA members to preserve the “historical and environmental integrity of the bend.” Accounts of the meeting repeated some

76. “Moccasin Bend Panel To Meet Archeologists,” *Chattanooga Times*, January 14, 1983.

77. “Task Force Promises Security for Moccasin Bend Archeological Sites,” *Chattanooga Times*, January 25, 1983.

78. “Area Archeologists Begin Dig In Moccasin Bend Area,” *Chattanooga News Free Press*, April 26, 1983.

79. “Jobs Bill funds to be used to sop root damage to archeological sites,” *Chattanooga Times*, August 15, 1983.

criticism of CRAA involvement. One attendee questioned their professional credentials, calling them “government employees and birdwatchers. They’re not people who are interested in archeology.”⁸⁰

CRAA representatives submitted the NRHP nomination in 1984. They also presented MBTF members with a report, “Moccasin Bend, Chattanooga’s First National Historic Landmark: Investigation of the Value of its Archeological and Historical Contents as a Public Resource” that summarized their investigation of 18 sites.

In November 1983, the Moccasin Bend Heritage Association issued a public statement to the MBTF representatives expressing concern about the ongoing archeology.⁸¹ They requested that MBTF members make public CRAA representatives’ findings and requested that future archeological work be open to competitive, professional bids. They also recommended that MBTF members establish an oversight committee to review the archeologists’ work.⁸²

The following January, MBTF chairman Rick Montague told the *Chattanooga Times* “the time may have come for a ‘natural parting of the ways’ between task force and CRAA.”⁸³ The source of contention was that the MBTF members “could not disagree more strongly with the conclusion put forth in” the national register nomination that sharply criticized city and county officials. That fall, CRAA representatives independently announced a major archeological excavation on Moccasin Bend. They made plans and issued a public statement without coordinating the work

80. “Officials field questions on bend at meeting,” *Chattanooga Times*, September 2, 1983.

81. The Moccasin Bend Heritage Association was founded by Cherokee chief Wilma P. Mankiller in the early 1980s. It was disbanded after three years.

82. Moccasin Bend Heritage Association, “Public Statement to the Moccasin Bend Task Force,” November 15, 1983.

83. “National Register Designation to be sought for 3 bend sites,” *Chattanooga Times*, January 13, 1984.

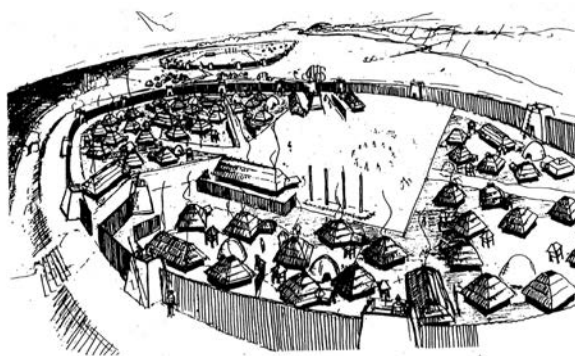


Figure 2.20: First draft artist’s rendering, Hampton Place ca. 1540, view to North, ©1983 Thos. McK. Scott, Major CR McCollough and the Chattanooga Regional Anthropological Association.

with MBTF members. In November, the *Chattanooga Times* issued a warning that questioned CRAA representatives’ motives. “It is essential that all further archeological work on this landmark peninsula be handled with the utmost professional care....”⁸⁴

While groups argued over the role of the CRAA members, MBTF representatives went ahead developing a master plan for Moccasin Bend. In November, they unveiled a riverfront development plan prepared by Boston consulting firm Carr, Lynch Associates. Preservationists voiced disapproval of the plan arguing that MBTF members had not allowed time for the archeologists to complete their study of the peninsula to know the location of American Indian resources. The MBTF officials countered that they were skeptical of working with archeologists because of their experience working with CRAA members. MBTF officials also asked the city and county commissions to revoke CRAA representatives’ status as the favored archeological consultant for the Bend and to ask CRAA members to return all artifacts recovered at Moccasin Bend.⁸⁵

The *Chattanooga Times* reported on city and county officials’ opposition to designating Moccasin Bend a national historic landmark.

84. “Needed: Professional attention,” *Chattanooga Times*, November 21, 1984.

85. “Bend Task Force postpones vote on archeology study,” *Chattanooga Times*, November 28, 1984.

CRAA officials prepared the nomination but the local officials were concerned that designation would prohibit any future development of the site. According to Jim Bowen, executive director of the River City Company, “We were really concerned that if the full 956 acres were given landmark designation, it would hamper some of the things that we had planned. . . . It’s later been stated that that was not in fact the case.”⁸⁶ NPS officials voiced support for the designation. Major McCollough prepared the nomination and NPS officials approved it in September 1986.

In 1989, CRAA members developed the Blue Blazes Trail, an outdoor trail that loops around the perimeter of the parcel of land purchased with Federal Land and Water Conservation Funds. Also in 1988, the Chattanooga City Commission voted to allow CRAA representatives to monitor American Indian sites to prevent vandalism.⁸⁷ Local American Indian groups later joined with the Hamilton County Sheriff Department to patrol the area and protect the graves. Thirteen members of the Chattanooga Intertribal Association served on the Moccasin Bend Native American Reserve Force.⁸⁸

CRAA members worked with the Chattanooga Public Works Department to fill looter holes with approximately 36 yards of crushed limestone gravel in 1990, 1991, and 1993, using volunteer labor. In 1996, Tennessee’s Division of Archeology cut a deal with local officials to clear the way for rezoning a portion of Moccasin Bend. The Tennessee Division of Archeology received an easement on 98 acres of unprotected land in return for allowing archeological resources on another tract, the Amnicola Farm, to be

developed without consideration for or mitigation of its archeological resources. The Tennessee Division of Archeology prepared “A Management Plan for Archeological Resources on Moccasin Bend, Chattanooga, Hamilton County, Tennessee,” which laid out four management goals. These goals include (1) coordinate federal, state, county, and local awareness of resources, (2) outline steps to preserve the resources, (3) outline alternative strategies for mitigation for proposed projects, and (4) establish research questions to govern future investigations.

FRIENDS OF MOCCASIN BEND NATIONAL PARK (1994–2002)

In 1993, a Chattanooga citizen planning initiative called “Revision 2000” classified Moccasin Bend as a local planning priority. They noted that it was the last large contiguous tract of undeveloped land adjacent to the city. Various groups made proposals for Moccasin Bend. A new group, the Friends of Moccasin Bend National Park (FMBNP) revived the concept of adding Moccasin Bend to the Chickamauga Chattanooga National Military Park. They received a \$25,000 grant to study the economic impact of the NPS designation. The study predicted a positive economic impact on the city if Moccasin Bend developed into a National Park site. The Moccasin Bend Task Force had proposed an outdoor theater at Moccasin Bend in the early 1980s. This idea regained momentum when the University of North Carolina’s Institute of Outdoor Drama proposed constructing an amphitheater near the Moccasin Bend Mental Health Institute. The Tennessee Outdoor Drama Association (TODA) soon joined their North Carolina counterparts in efforts to advocate for the construction of the amphitheater. In April and May 1994, Jeffery L. Brown Institute of Archeology at University of Tennessee Chattanooga conducted an archeological survey of 40.2 acres owned by the State of Tennessee Moccasin Bend Mental Health Institute under consideration

86. “Landmark designation for bend postponed,” *Chattanooga Times*, June 18, 1986.

87. “City OKs agreement for group to check Moccasin Bend sites,” *Chattanooga Times*, January 6, 1988.

88. “American heritage under siege,” *Chattanooga Times*, March 24, 1994.

for the amphitheater (40HA134, 40HA394, and 40HA395). They found American Indian remains dating from the Late Archaic and Woodland periods. They uncovered evidence of a mid-19th century house site seen on Civil War-era maps. They found significant features associated with the Union batteries on Stringers Ridge, including tent pads, small picket entrenchments, latrines, and roadbeds. The report galvanized public opposition to the amphitheater plan and the Tennessee Outdoor Drama Association withdrew its plans.⁸⁹

Mickey Robbins, chairman of the Moccasin Bend Mental Health Institute and grandnephew of Mrs. Sim Perry Long, provided leadership for the proponents to put Moccasin Bend under NPS ownership. He enlisted the help of local U.S. Rep. Zach Wamp. In 1996, they proposed a Trail of Tears Interpretive Center and a 956-acre national park. In 1997, the Friends of Moccasin Bend National Park received a \$200,000 grant from American Battlefield Protection Program to study the Civil War resources on the Bend. White Star Consulting prepared the report, which concluded that NPS officials were the only appropriate managers of the site and supported FMBNP members' proposed visitor center.

NPS officials responded to Representative Wamp's proposal to add Moccasin Bend to the Chickamauga Chattanooga National Military Park by repeating their opinion that the mental institute and the golf course were incompatible resources in need of removal. This generated considerable concern among Chattanooga residents. State officials prepared tentative plans to phase out the hospital. Citizen concerns about the impact on their economy and recreational use of the Bend temporarily forced Wamp to table his efforts. In November 2000, Wamp told Friends of Moccasin Bend National Park that he would not introduce a bill to Congress to create the park unless he got the support of local officials. Friends of Moccasin Bend National Park representatives

led negotiations between local citizens and NPS officials over issues, such as the golf course.⁹⁰ NPS officials agreed to a compromise that allowed the golf course to remain "until the land is no longer used for that purpose."⁹¹

MOCCASIN BEND NATIONAL ARCHEOLOGICAL DISTRICT (2003–2012)

On March 13, 2001, Representative Wamp introduced HR 980, calling for the creation of Moccasin Bend National Archeological District to be part of the Chickamauga Chattanooga National Military Park. Moccasin Bend Mental Health Institute and the golf course would operate indefinitely, but the land may become part of the park when they close. Local groups rallied behind the plan. The House Resources Committee unanimously approved the bill in October 2001 and the full House of Representatives approved it in early 2002. The Senate passed an amended bill but Congress adjourned before the two bills could be reconciled.⁹² Representative Wamp reintroduced the bill in 2003, and it passed. President George W. Bush signed it into law on February 20, 2003, authorizing the Moccasin Bend National Archeological District. The *Chattanooga Times Free Press* reported in June 2003 that Representative Wamp requested \$500,000 to stabilize the Moccasin Bend shoreline.⁹³

The following is an excerpt from the enabling legislation for the park:

90. HMS Golf of Atlanta currently operates the course.

91. "Bend plan proponents worry over consistency," *Chattanooga Times Free Press*, March 17, 2001.

92. "Bend park bill passes, but Senate, House differ," *Chattanooga Times Free Press*, November 21, 2002.

93. "Panel OKs funds to stem Moccasin Bend erosion," *Chattanooga Times Free Press*, June 26, 2003.

89. "No amphitheater on Bend," *Chattanooga Times*, February 1994.

(1) IN GENERAL- In order to preserve, protect, and interpret for the benefit of the public the nationally significant archeological and historic resources located on the peninsula known as Moccasin Bend, Tennessee, there is established as a unit of Chickamauga and Chattanooga National Military Park, the Moccasin Bend National Archeological District.

(2) BOUNDARIES- The archeological district shall consist of approximately 780 acres generally depicted on the Map. The Map shall be on file and available for public inspection in the appropriate offices of the National Park Service, Department of the Interior.

(3) ACQUISITION OF LAND AND INTERESTS IN LAND-

(A) IN GENERAL- The Secretary may acquire by donation, purchase from willing sellers using donated or appropriated funds, or exchange, lands and interests in lands within the exterior boundary of the archeological district. The Secretary may acquire the State, county and city-owned land and interests in land for inclusion in the archeological district only by donation.

(B) EASEMENT OUTSIDE BOUNDARY- To allow access between areas of the archeological district that on the date of the enactment of this section are noncontiguous, the Secretary may acquire by donation or purchase from willing owners using donated or appropriated funds, or exchange, easements connecting the areas generally depicted on the Map.

(d) ADMINISTRATION-

(1) IN GENERAL- The archeological district shall be administered by the Secretary in accordance with this section, with laws applicable to Chickamauga and Chattanooga National Military Park, and with the laws generally applicable to units of the National Park System.

(2) COOPERATIVE AGREEMENT- The Secretary may consult and enter into cooperative agreements with culturally affiliated federally recognized Indian tribes, governmental entities, and interested persons to provide for the restoration, preservation, development, interpretation, and use of the archeological district.

(3) VISITOR INTERPRETIVE CENTER- For purposes of interpreting the historical themes and cultural resources of the archeological district, the Secretary may establish and administer a visitor center in the archeological district.

(4) GENERAL MANAGEMENT PLAN- Not later than three years after funds are made available under this section, the Secretary shall develop a general management plan for the archeological district. The general management plan shall describe the appropriate protection and preservation of natural, cultural, and scenic resources, visitor use, and facility development within the archeological district consistent with the purposes of this section, while ensuring continued access by private landowners to their property.⁹⁴

The creation of the Moccasin Bend National Archeological District actually did not happen until February 2004, when the state and local government donated 672 acres of public land to federal ownership.⁹⁵ The park boundaries excluded the Moccasin Bend Mental Health Institute, the golf course, the WDEF radio tower, Hamilton County firing range, and a model airplane facility.⁹⁶ In 2003, the federal government received two private tracts of 107

94. H.R. 216 (108th): Moccasin Bend National Archeological District Act, 108th Congress, 2003–2004. Text as of January 7, 2003 (Introduced).

95. The actual land transfer agreements were signed in August of 2004.

96. "Putting the Bend on hold," *Chattanooga Times Free Press*, February 10, 2004.

total acres. In April 2004, Tennessee Governor Phil Bredeson promised to donate 220 acres of state land.⁹⁷

The Moccasin Bend National Archeological District has a core area on the southern tip of the Bend, which includes most of the Civil War resources on Stringers Ridge and important American Indian sites. This core area does not include a portion of land surrounding the hospital or the WDEF radio tower. There are two additional parcels north of this core area: Rock-Tenn parcel north of the wastewater treatment facility west of Moccasin Bend Road and Serodino Property on Hamm Road, east of Stringers Ridge.

The *Chattanooga Times Free Press* applauded Representative Wamp's victory. The editors commented, "the very creation of a new national park unit is a rarity these days. The Moccasin Bend National Archeological District has come to life under a deficit-ridden administration ruled by a president who came to office vowing to exclude expansions to the park system in order to focus resources on the long neglected maintenance needs that haunt the park service."⁹⁸

Between 2000 and 2005, the National Park Service contracted Alexander Archeological Consultants to conduct a study at Moccasin Bend. This study included the following: 1) an inventory of known archeological sites at the bend; 2) addenda to the potential archeological resources at several sites; 3) survey of three previously unrecorded sites; and 4) production of the three-volume "Moccasin Bend Archeological District Archeological Overview and Assessment." In 2005, R. Christopher Goodwin Associates surveyed the shoreline around Moccasin Bend as part of a riverbank stabilization project. Shawn Bengé became superintendent of Chickamauga Chattanooga National Military

Park in February 2007. The *Chattanooga Times Free Press*, reporting on his arrival, mentioned that impending NPS projects included major bank stabilization and a Moccasin Bend interpretive center.⁹⁹

The \$3.2 million stabilization project began in December 2010. The *Chattanooga Times Free Press* credited Representative Wamp for securing the money needed for land acquisition, park and interpretive center design, and stabilizing the bank. They reported that the 5.4-mile perimeter of Moccasin Bend was unstable. According to NPS park ranger Sam Weddle, "in some places we're losing a foot a year. The plan was to cover the bank with rip rap and stabilize the soil with native grasses and trees."¹⁰⁰ The Army Corps of Engineers oversaw the stabilization of a half-mile section of the western riverbank in 2011.

Planning for the future interpretive center at Moccasin Bend included a 2009 "Development Concept Plan Environmental Assessment and Assessment of Effect." This planning effort included both public involvement and tribal consultations in an effort to choose the best site for the center. Currently, the NPS staff is working with the Friends of Moccasin Bend National Park, and a multi-disciplinary consultant team to develop designs for the center. A tract has been selected for this purpose, formerly owned by Peter Serodino.

Many people have long recognized the city of Chattanooga for innovative planning and design projects in its downtown and along the Tennessee River. In an effort to expand the existing greenway system and create a more attractive and functional gateway to Moccasin Bend, the city selected a planning firm to work on the Moccasin Bend Gateway Plan. Focusing on the roadways and riverfront that connect the downtown and the Bend, the plan proposes pedestrian friendly streetscapes,

97. "Governor commits land for Bend Park," *Chattanooga Times Free Press*, April 27, 2004.

98. "A park at last on Moccasin Bend," *Chattanooga Times Free Press*, August 24, 2004.

99. "New Bend on river," *Chattanooga Times Free Press*, February 11, 2007.

100. "Park work to shore up riverbanks," *Chattanooga Times Free Press*, December 15, 2010.

expansion of the Tennessee Riverwalk, and green space connections as a means to connect the downtown with Stringers Ridge and the future interpretive center. The plan was presented to the public in November 2011.¹⁰¹

101 . "Moccasin Bend Gateway Plan gets wows," *Chattanooga Times Free Press*, November 15, 2011.

EXISTING CONDITIONS

INTRODUCTION

The focus of this chapter is the known culturally and archeologically important sites at Moccasin Bend, with consideration given to the entirety of NPS-owned property on the Bend. These nationally significant sites represent the extensive history of American Indian occupation at Moccasin Bend. The Trail of Tears National Historic Trail travels through a portion of the site, which commemorates the forced removal of the Cherokee from their ancestral homelands in 1838. In addition to the American Indian sites, Moccasin Bend contains Civil War earthworks found on the southeastern section of Stringers Ridge. This section also describes some resources and property located within the NHL district and study area that the National Park Service does not currently own or manage.

Moccasin Bend is a peninsula formed by a prominent bend in the Tennessee River, in Hamilton County, 1.5 miles west of Chattanooga, Tennessee. The study area comprises just over 1,000 acres consisting of a mixture of woodland, former agricultural land, government facilities, and residential, recreational, and industrial development. Figure 1.2 and illustration 1.1 map the existing conditions and varying land uses found within the study area.

This chapter of the cultural landscape report inventories the existing conditions of the property using a combination of contemporary photographs, plan view graphics and narrative descriptions. The first half of this chapter documents the natural systems and features while the second half documents cultural features. For the sake of clarity, this document divides the known culturally significant resources into the following landscape components: Hampton Place, Mallards Dozen site, Vulcan site, Woodland Mound complex,

Brown's Homestead and Ferry sites, and Civil War sites along Stringers Ridge.

The "Natural Systems and Features" section describes the many important natural resources within the study area. The "Cultural Resources" section, which follows the "Natural Systems and Features" section, describes the cultural resources found throughout the project area and then describes each component landscape. The "Other Cultural Resources" section, found at the end of the "Existing Conditions" chapter, individually describes various ancillary resources and properties within the study area.

NATURAL SYSTEMS AND FEATURES

Physiography, Geology, and Soils

Moccasin Bend is located in the Ridge and Valley physiographic province near its junction with the Cumberland Plateau in the state of Tennessee. The character of the Ridge and Valley province consists of long, linear ridges and parallel lowland valleys that trend in a northeast to southwest direction. Over time, erosional processes wore away softer layers of rock thereby forming valleys. Erosion resistant rock remains in the form of steep, irregular ridges. Referred to as the "Fort Payne Knobs", because they consist of erosion resistant limestone and shale of the geologic Mississippian age Fort Payne Formation, these knobs form a linear ridge on Moccasin Bend known as Stringers Ridge. Mississippian age limestone, which developed into deep residual soils, underlies the flat valleys of Moccasin Bend. The ancestral Tennessee River deposited alluvium over the residual soils, creating a rich and productive river valley.¹ Former river terraces appear in step-like patterns along the western side of the study area and indicate the movement of the Tennessee River throughout

11. Alexander, 21-23.

history, providing a visible record of geologic and hydrologic change. Illustration 3.1 shows the geologic formations surrounding Moccasin Bend.

Geology serves as the foundation of the landscape found at the Bend and many of the factors that led to the decision of prehistoric people to settle here were probably geologic in nature. The steady supply of fresh water provided by the Tennessee River, the fertile alluvial soil deposited by the river, and the topographic limitations imposed by the surrounding mountains are all characteristics of the unique geology that led to a long history of human settlement on the Bend.

The natural passageway of the Tennessee River gap through the mountains has long attracted people to the area and broadly facilitated American Indian settlement and travel throughout the region.² The geology of the area also influenced the settlement and development of Chattanooga as a major communication and transportation hub, making it a prized military target during the Civil War.³ The local landforms, and the limitations created by them, influenced the movement of troops and battle proceedings during the war. The distinctive topography at the southern tip of Stringers Ridge formed a protective hollow used by Union soldiers during the war to prevent Confederate troops from using the northern face of Lookout Mountain, which is located directly across the river.⁴

The landforms on either side of the Bend provided a natural passageway for human travel over millennia prior to the 20th century. Trade routes followed the low point of the saddle landform east of the Bend, and crossing points evolved over time. Trade routes and

2. Trista L. Thornberry-Ehrlich. "Geologic Resources Inventory Scoping Summary: Chickamauga and Chattanooga National Military Park, Georgia and Tennessee." Report prepared for the National Park Service, (August 5, 2009): 12.

3. *Ibid.*, 13.

4. *Ibid.*

migration events such as the Trail of Tears followed these established paths of travel.

For much of the 20th century, the rich soils in the relatively flat river valley made Moccasin Bend attractive for agricultural uses. In later years, the proximity of Moccasin Bend to Chattanooga and the Tennessee River made the area appealing for industrial uses, including a wastewater treatment facility.

Moccasin Bend's proximity to the only natural passageway through the surrounding mountains has also made the site a desirable route for utility corridors such as overhead transmission lines and underground gas pipelines, which provide energy to the City of Chattanooga from sources throughout the region.

The soils found on Moccasin Bend come from parent materials including quartzite, shale, and granite from the Appalachian Mountains, as well as, limestone and sandstone from the Cumberland Plateau and Ridge and Valley provinces.⁵ Seven distinct soil series make up the study area. Illustration 3.2 maps these soils in detail and provides a brief description of each.

Well-drained soils occur in the western and southern portions of the project area; however, these locations are prone to flooding. The soils that underlie the Moccasin Bend Golf Course have poor drainage with slopes averaging 5%.

The soils that underlie Stringers Ridge are generally gravelly and well drained. Weathered from cherty limestone, these soils are quite steep and not suited to development.

The area south of the golf course contains the dredge spoils pile. Soils here consist of sand and gravel dredged from the southwestern riverbank of Moccasin Bend during construction of Interstate 24 in the 1963. Soil boring tests performed in 1964 revealed fill

5. "Moccasin Bend Tennessee: Draft Cooperative Management Plan and Environmental Assessment." Report prepared for the National Park Service, (September 1998): 32.

material to be unstable and unable to support structural development. The borings revealed the depth of the spoil material to be between 14 and 17 feet. Additional testing in 1981, showed improvements in soil stability, but recommended additional testing of the soil bearing capacity before any development.⁶ According to the 1998 Development Concept Plan/Environmental Assessment, “although archeological resources were disturbed and lost by the dredging operation, archeological salvage investigations carried out in conjunction with the project confirmed that American Indians occupied the location for several thousands of years.”⁷

In 2006, the Southeast Archeological Center (SEAC), conducted soil investigations as part of subsurface archeological testing at three sites considered for development of an interpretive center for the site. Soil borings taken at the Interpretive Center tract revealed the extensive fill added throughout the site. As evidenced by an abrupt transition between the overlying fill and culturally sterile clay subsoil, SEAC staff concluded that the topsoil on the property likely was scraped off prior to the importation of fill material.⁸ They also determined the presence of archeological resources to be unlikely within the underlying clay subsoils at this location.⁹ As part of the same project, SEAC staff performed shovel tests at the site of the Blue Blazes Trail. Soils in this location were “generally thin, having formerly been actively farmed and now leached from the privet and pine in the area.”¹⁰ At the Law Enforcement Firearms Training Range, SEAC staff performed additional shovel

testing and described the soil as “generally a light to medium brown clayey loam extending up to 50 cm below surface.”¹¹

Topography and Hydrology

The Tennessee River is a defining feature of the landscape and the path of the river as it flows around the study area gives Moccasin Bend both its name and characteristic shape. The river is an entrenched meandering stream containing many meander loops throughout its course. The deflection of the Tennessee River against Lookout Mountain formed Moccasin Bend, the most spectacular meander loop on the river. Cut banks and point bars make up the outer and inner curves of a meander loop. As the name implies, a cut bank is where the river flows the fastest and erodes its own bank. River currents are slowest on the inner curve of a loop, known as a point bar. The decreased velocity along the inner curve causes the river to deposit its sediments. In a general sense, Moccasin Bend is a point bar with Lookout Mountain as its cut bank.¹²

The river’s course has shifted over time, resulting in distinct floodplain terraces found on the eastern shoreline of the river along the site’s western boundary. The eastern side of Moccasin Bend consists of Stringers Ridge, a linear chain of knobs that makes up the upland portions of the study area. Two fresh water springs exist in these uplands. The highest point in the project area occurs atop one of the southernmost knobs of Stringers Ridge at an elevation of 858 feet above sea level. The lowest point in the study area is on the Interpretive Center tract, where the bank of the Tennessee River reaches an average elevation of roughly 633.5 feet above sea level.

The river elevation fluctuates due to flood control mechanisms, which the Tennessee Valley Authority (TVA) controls via a series

6. Ibid.

7. Ibid., 9.

8. NPS Denver Service Center. 56.

9. Ibid. 82.

10. Southeastern Archeological Center. “Trip Report on Archeological Survey of possible Visitor’s Center locations at Moccasin Bend National Historic Landmark (MOBE).” Report Prepared for the National Park Service, September 11-22, (2006): 6.

11. Ibid. 9.

12. Habte G. Churnet. *Seeing Southeastern Geology through Chattanooga*. (Red Bank, Tennessee: HGC Publishers, 1997), 134.

of dams and locks located both upstream and downstream from the site. Nickajack Dam is located downstream and west of the site. It impounds the Nickajack Lake, which stretches from Nickajack Dam to Chickamauga Dam (upstream from the site) along the course of the Tennessee River. Full pool for Nickajack Lake is approximately 633.6 feet above sea level, and remains consistent during the course of the year. The U.S. Army Corps of Engineers controls navigation along the Tennessee River.

As early as the Archaic period, at times of high water flow, the flat bottomland of Moccasin Bend would flood, creating an island on the westernmost portion of the Bend. This high point and part-time island provided an attractive location for settlement. This slough has continued to flood even in recent decades (figure 3.1). Many of the important archeological sites found to date are located here. Today a narrow slough divides this former island from the rest of Moccasin Bend, marking the presumed extent of the seasonal island.

A subtle topographic feature formed by river deposits include terracing running north and south along Moccasin Bend. These terraces vary in age with the oldest just west of Stringers Ridge and the youngest just east of the aforementioned “island.” These “former river terraces, appearing in stair step-like patterns at Moccasin Bend . . . preserve a record of paleoclimatic changes.”¹³

In the 20th century, alterations to the topography of Moccasin Bend were commonplace. The construction of Interstate 24 around the base of Lookout Mountain in 1963 resulted in the loss several hundred feet of shoreline at the southern tip of the Bend. State officials widened the river to accommodate the new interstate. The construction included dredging a strip of riverbank (500 feet long x 125–250 feet wide)

13. NPS Denver Service Center. “Moccasin Bend National Archeological District: Development Concept Plan, Environmental Assessment/ Assessment of Effect.” Prepared for the National Park Service, (Denver, CO, 2009), 12.



Figure 3.1: Aerial photograph showing flooding of the slough on Moccasin Bend, 1973, (Alexander, 67)

along the “heel” and “instep” of the Bend. Construction workers added water to the dredged material before pumping slurry material onto the first floodplain terrace near the middle of the project area.¹⁴ The area, known as the dredge spoils pile, consists of unstable soils. As the material settled, new drainage patterns formed, resulting in wetland areas and eroded drainage channels. Illustration 3.3 shows the location of the dredge spoils site and the approximate extent of shoreline removal.

Another noteworthy topographic change occurred on the Interpretive Center tract. The previous owner of the site added fill dirt and construction spoil material to the parcel in an attempt to raise the land above the 100-year floodplain. The owner was successful, and the majority of the property is above the

14. *Ibid.*, 9.

floodplain today. In some places, more than 20 feet of fill material is present. NPS staff conducted core borings of the site in 2006, which revealed the depth of fill present on the property.

Other alterations to the topography include land disturbance activities associated with the construction of the various buildings and structures located on the Bend today. These include the construction of the Moccasin Bend Mental Health Institute, the Moccasin Bend Golf Course, the Moccasin Bend Wastewater Treatment Facility, and the Law Enforcement Firearms Training Range, among others. The construction of a vehicular racetrack in the 1950s on the Old Federal Road tract, affected the topography in that area, creating an oval shaped course that is still evident in the landscape today. The construction of Hamm Road through a gap in Stringers Ridge altered the topography of the ridge considerably. Illustration 3.3 maps the topography and hydrology of Moccasin Bend.

Vegetation

Agriculture, development, logging, and dredging activities degraded the native vegetation of Moccasin Bend. For most of modern history, the lowlands consisted of a mixture of pasture and farmland planted in row crops. Today vegetation in these areas consists of early successional forest. White pines (*Pinus strobus*), hackberries (*Celtis occidentalis*), eastern red cedars (*Juniperus virginiana*), locust (*Gleditsia triacanthos*), red maple (*Acer rubrum*), river birch (*Betula nigra*), sycamore (*Platanus occidentalis*), and sweetgum (*Liquidambar styraciflua*) dominate these flat low-lying areas. A variety of young hardwoods, brambles (*Rubus spp.*), and dense stands of the invasive nonnative Chinese privet (*Ligustrum sinense*) dominate the understory. Several hackberry-lined former fencerows occur within the floodplain. Many of these fencerows are visible in historic photographs taken from Lookout Mountain in the late 1800s. Wetland areas

occur throughout the floodplain. Indicator species such as cattails (*Typha spp.*), brushy bluestem (*Andropogon glomeratus*), and rushes (*Juncus spp.*) are common in these locations. Old fields containing early successional plant communities exist in the floodplain as well. Broomsedge (*Andropogon virginicus*), Sumac (*Rhus spp.*), and volunteer pines (*Pinus spp.*) are common in these areas.

The uplands of Stringers Ridge contain a mature oak-hickory forest. This area shows little evidence of logging using mechanized equipment and possesses great natural beauty. Photographs from the Civil War show woodland covering the ridge at that time. Mature trees appear to be 60–110 years old today. Common species growing along the ridge include chestnut oak (*Quercus prinus*), white oak (*Quercus alba*), hickories (*Carya spp.*), black oak (*Quercus velutina*), red oak (*Quercus rubra*) sourwood (*Oxydendrum arboreum*), hackberry, and white pine. Understory species include mountain laurel (*Kalmia latifolia*), smilax (*Smilax spp.*), poison ivy (*Rhus radicans*), deciduous azaleas (*Rhododendron spp.*) and blueberries (*Vaccinium spp.*).

Invasive nonnative species are prevalent throughout the study area, particularly within the floodplain. Chinese privet (*Ligustrum sinense*) and Japanese honeysuckle (*Lonicera spp.*) are the most frequently observed invasive species. Mimosa (*Albizia julibrissin*) and multiflora rose (*Rosa multiflora*) also occur on Moccasin Bend. The presence of these invasive nonnative species, which often have a competitive advantage over native species in disturbed conditions, has altered the vegetation makeup of the study area. These species pose a threat to native plant communities, due to a relative lack of naturally occurring pests and diseases.

Maintained and open landscapes are associated with the Moccasin Bend Mental Health Institute, the Moccasin Bend Golf Course, the Moccasin Bend Wastewater Treatment Facility, the WDEF radio towers, and the Law Enforcement Firearms Training

Range. The vegetation varies in these developed areas, but generally consists of mown areas dotted with ornamental trees and shrubs. The “Other Cultural Resources” section, at the end of this chapter, describes the vegetation in each of these locations in detail. Illustration 3.4 shows the location of different vegetation types on Moccasin Bend.

CULTURAL FEATURES

Land Use

The following summary of existing land use on Moccasin Bend comes directly from the “Development Concept Plan Environmental Assessment/Assessment of Effect” produced by the National Park Service for Moccasin Bend National Archeological District in 2009..

The varied land uses on Moccasin Bend include government facilities and residential, recreational, and industrial development. The federal government (National Park Service) (755 acres), the City of Chattanooga and Hamilton County (183 acres), the City of Chattanooga (184 acres), the state of Tennessee (102 acres), and private landowners (22 acres) have landholdings on Moccasin Bend. On the northernmost area of the Bend is a 99-acre tract of NPS-owned land previously owned by the Rock-Tenn Company that the National Park Service now owns and manages. At that tract’s southern boundary is the City of Chattanooga-owned Moccasin Bend Wastewater Treatment Facility. Near the junction of Hamm Road and Moccasin Bend Road is a NPS-owned tract referred to as the Interpretive Center tract. The National Park Service plans to use this property for the site of an interpretive center. The City of Chattanooga and Hamilton County jointly own the Moccasin Bend Golf Course, the Law Enforcement Firearms Training Range, and the site of a former model airplane facility. The 22 acres under private ownership include the WDEF radio towers and a private residence. The state mental health hospital occupies 102 acres on the southern tip of

the Bend. Interspersed among these public and private parcels are NPS-owned tracts, one of which includes the Blue Blazes Trail that crosses between the golf course and the WDEF radio towers. The federal government (National Park Service) also owns shoreline easements bordering the wastewater treatment facility, golf course, mental health hospital, and firearms training range.

The “Other Cultural Resources” section of the document at the end of this chapter describes these disparate properties in detail.

The federal government maintains its holdings on the Bend as Moccasin Bend National Archeological District, a unit of Chickamauga and Chattanooga National Military Park. The primary use of the site is protection and preservation of the vast archeological resources known to exist on the Bend. Recreation in the form of hiking occurs at the Blue Blazes Trail. Infrequent ranger-led walks interpret the Civil War sites along Stringers Ridge and the Brown’s Ferry and Homestead sites associated with the Trail of Tears. A new interpretive center eventually will interpret the known history of American Indian occupation on the Bend.

Circulation

Moccasin Bend Road, a two-lane asphalt roadway that runs the length of the study area from north to south along the base of Stringers Ridge, is the primary vehicular circulation route on the Bend. National Park Service does not own or maintain any portion of Moccasin Bend Road. The existing road generally follows the same route as unimproved roads visible in historic photos and on historic United States Geological Survey (USGS) maps. Moccasin Bend Road connects the Bend with the city of Chattanooga via Hamm Road, Manufacturers Road, and Riverside Avenue, two vehicular routes through Stringers Ridge located at the northern end of the study area. Riverside Avenue follows a natural passageway in the ridge. The construction of Hamm Road required alterations to the topography

of Stringers Ridge. Hamm Road acts as the northwestern boundary of the Interpretive Center tract and will eventually provide vehicular access to the proposed interpretive center. An unnamed spur road connects the Law Enforcement Firearms Training Range with Moccasin Bend Road. This asphalt road passes through a natural break in the ridge. Another unnamed spur provides vehicular access to the WDEF radio towers and the Blue Blazes Trail. A short section of driveway connects a privately owned residence with Moccasin Bend Road near the former model airplane facility. The Moccasin Bend Golf Course, the Moccasin Bend Wastewater Treatment Facility, and the Moccasin Bend Mental Health Institute all contain internal circulation systems accessed from Moccasin Bend Road. A road remnant provides access to the former model airplane facility and two remnant roads provide access to the Old Federal Road tract.

The Blue Blazes Trail provides the only formalized pedestrian circulation in the study area. The “Other Cultural Resources” section at the end of the chapter describes this one and one-half mile loop trail. A series of historic road traces crisscross Stringers Ridge connecting the remaining Civil War earthworks to one another. The “Component Landscapes” section of this chapter discusses these routes. Access to the American Indian archeological sites is informal, following utility corridor paths and other unmarked trails. The “Component Landscapes” section provides additional information related to the circulation associated with these sites.

Utilities

An abundance of utilities and their associated easements crisscross Moccasin Bend. Colonial Pipeline maintains two 50-foot petroleum pipeline rights-of-way. The Chattanooga Electrical Power Board has a 150-foot right-of-way for a high-tension power line that crosses portions of the study area. An imposing transmission tower occupies the northeast

corner of the Interpretive Center tract along the Tennessee River. The Law Enforcement Firearms Training Range contains a similar transmission tower along the bank of the river. After crossing the river this transmission line travels over the top of Stringers Ridge before turning and heading north through the study area. In addition to the large transmission lines, smaller overhead power distribution lines run parallel to Moccasin Bend Road, providing electricity to the various developments found along the roadway. A 50-foot sewer easement bisects the Interpretive Center tract from the northwest corner to the southern border. The easement contains parallel 60-inch and 84-inch reinforced concrete sewer lines that service the city of Chattanooga. Illustration 3.5 maps the existing utility corridors on Moccasin Bend.

Views and Vistas

Views and vistas exist both within the site and from the site across the Tennessee River. A glimpse of Lookout Mountain is visible from the Interpretive Center tract, and in fact, that view has been a consideration in the site planning for the proposed interpretive center (figure 3.2). Views of Chattanooga are visible from the lowlands east of Stringers Ridge, including the Interpretive Center tract and the Law Enforcement Firearms Training Range. These views feature the Tennessee River in the foreground adding to the visual interest. Lookout Mountain, Chattanooga, and the Tennessee River are all visible from the top of one of the knobs that make up the southeastern tip of Stringers Ridge, near the site of a former radio tower and one of the Civil War earthworks. Trees filter the view in this location, but make it no less spectacular (figure 3.3).

The cleared areas surrounding the Moccasin Bend Mental Health Institute offer views of Lookout Mountain to the south and Raccoon Mountain in the distance to the west. On the western side of Moccasin Bend, all along the eastern shore of the river, there are impressive

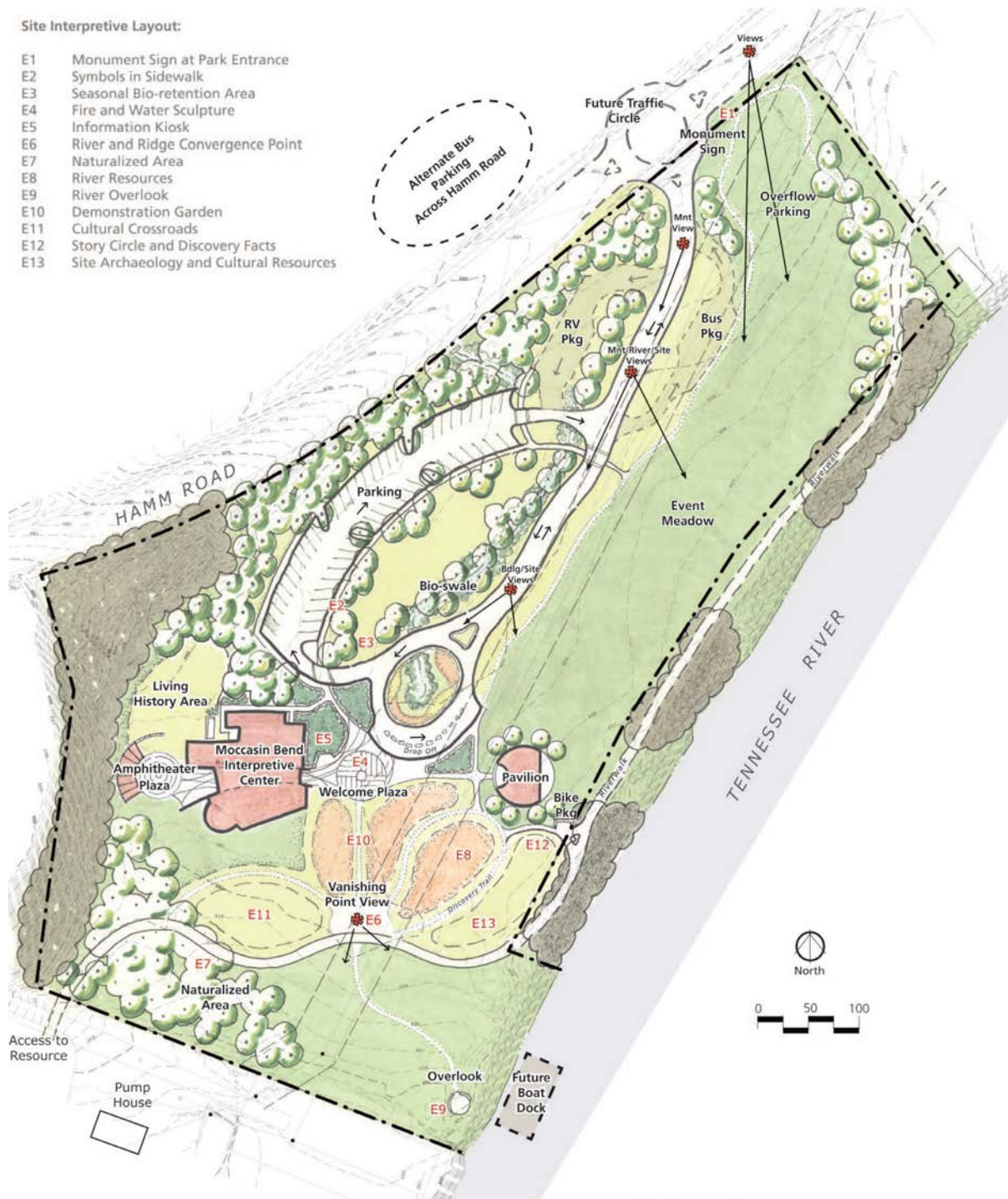


Figure 3.2: Proposed site layout Moccasin Bend Interpretive Center, 2012, (The Jaeger Company)

views of the mostly undeveloped ridge on the shore opposite Moccasin Bend (figure 3.4). Recent vacation home developments along portions of the ridge compromise the view in some areas (figure 3.5). The Brown's Ferry crossing is visible from an area of woodland

kept clear of undergrowth by the National Park Service. This cleared area is located on the Old Federal Road tract and used for interpretation of Brown's Ferry, Brown's Homestead site, and the Federal Road. The pass through the ridge on the western side of



Figure 3.3: View of Chattanooga from east of Stringers Ridge, 2012 (The Jaeger Company)

the river, where the ferry landing was located, is visible as well. A few privately owned buildings are visible (figure 3.6).

The view of Moccasin Bend from Lookout Mountain is probably the best-known and most impressive views associated with the Bend (figure 3.7). From Point Park, the entirety of Moccasin Bend is visible, as well as the route of the Tennessee River through the valley, and the city of Chattanooga. On a clear day, it is possible to see for miles in all directions. This view of Moccasin Bend was the catalyst for early 20th-century efforts to preserve the Bend. Preservationists wanted to preserve the scenic beauty of the Bend, which at the time still maintained the bucolic character known to exist during the Civil War. Photographs dating from the 1860s through the present demonstrate the importance of this view throughout history, and document the changes in land use on the Bend over time. Historic and contemporary postcards for the area document the viewshed and illustrate the significance of the view, and Moccasin Bend, to tourists and residents of the region.

COMPONENT LANDSCAPES

Hampton Place

Hampton Place (40HA146) is the premier archeological site on Moccasin Bend. The complex contains two large Late Mississippian towns potentially visited by Spanish explorers. A separate palisade surrounded each of the



Figure 3.4: View from west side of Moccasin Ridge across Tennessee River, 2012 (The Jaeger Company)



Figure 3.5: Views of homes along ridge across Tennessee River from Moccasin Bend, 2012 (The Jaeger Company)



Figure 3.6: View of pass at Brown's Ferry crossing location, 2012 (The Jaeger Company)

two sites and each contained community buildings, a plaza, and semi-subterranean dwellings. Archeology to date reveals intact, burned houses containing late prehistoric artifacts and Spanish artifacts dating from the 16th century. The presence of Spanish



Figure 3.7: View of Moccasin Bend from Lookout Mountain, 2012 (The Jaeger Company)

artifacts promises unparalleled data on the initial influence of European culture on indigenous Southeastern Indian culture. Experts consider Hampton Place one of the most important European contact sites in the United States. The fact that at least part of the complex burned is noteworthy. The fire froze household materials and trade goods in place within the building remnants, preserving the site as it existed during the 16th century. Subsequent alluvial deposition of the Tennessee River further sealed the site. According to Alexander, “the mortuary features of site 40HA146 were heavily looted in the 1970s, however recent investigation has demonstrated the intact nature of a large number of archeological deposits on this site.”¹⁵

Today, there is little evidence in the landscape of the immense significance of Hampton Place. Aside from the uneven ground surface associated with the looting and stabilization of the damaged sites and a few wooden posts that indicate the corners of dwellings excavated during archeological investigations, there is no visible record of the American Indian occupation of the sites.

Circulation. Access to both sites is via a cleared transect maintained in association with the Chattanooga Electric Power Board’s power line that crosses the river at Moccasin Bend near Hampton Place. This utility bisects the two major habitation sites at Hampton Place. An unimproved single-lane service road leads from Moccasin Bend Road to the western

shore of Moccasin Bend along this corridor. Two short spurs branch from this service road, providing access to both sites. Hampton Place is also accessible via Moccasin Bend Mental Health Institute property (although the institute is only open to approved visitors.) A utility corridor follows the shoreline at the southern tip of Moccasin Bend toward the west before eventually reaching the southernmost Hampton Place site.

Vegetation. Vegetation at the southernmost site consists of canopy trees and an understory kept open by periodic management (figure 3.8). Disturbance related to looting activities creates an uneven ground plane currently covered by a variety of low-growing species. At the northernmost Hampton Place site, floodplain tree species provide canopy, the understory is open due to periodic management and the ground plain is covered by a low-growing, invasive nonnative groundcover, Nepalese browntop (*Microstegium vimineum*) (figure 3.9). The impact of existing vegetation on archeological resources is unknown; however, penetrating tree/vegetation roots would likely present potential disturbance to the stratigraphy of archeological resources.

Structures. A large sign mounted on five metal posts is located adjacent to the river in the utility corridor that divides the two Hampton Place sites (figure 3.10). Painted in bright orange, this sign serves to alert ships to the presence of a liquid petroleum line that crosses under the river in this location. The sign is in good condition. Effects of the sign and its supports on archeological resources in this location are unknown.

Small Scale Features. Contemporary small-scale features include wooden posts that mark the corners of excavated buildings, and regulatory signs placed at each site by the various government agencies that have managed the property. In addition, a chain link fence is located along the shoreline at the southern site. The picnic tables are in fair condition, with signs of rust and neglect (figure 3.11). These tables have been placed

¹⁵ Alexander, 104.



Figure 3.8: Vegetation at Hampton Place site, 2012 (The Jaeger Company)



Figure 3.10: Sign at Hampton Place site, 2012 (The Jaeger Company)



Figure 3.9: Nepalese browntop at Hampton Place site, 2012 (The Jaeger Company)

at the site by NPS staff for staff use only. They are not intended for public use. The wooden posts are in good condition; however, a few are loose and require resetting (figure 3.12). The City of Chattanooga and Hamilton County placed signs here in an attempt to keep looters and visitors out of the sites. Condition of the signs varies from good to poor (figure 3.13). The chain link fence is incomplete and in poor condition (figure 3.14).

Mallards Dozen Site

The Mallards Dozen site (40HA147) is a large, deeply stratified site with Early/Middle Archaic period occupation deposits and a concentrated Middle Woodland period component located to the north of Hampton Place.¹⁶ Archeological testing discovered a Middle Woodland period structure

¹⁶. NPS Denver Service Center. 55.



Figure 3.11: Picnic tables at Hampton Place site, 2012 (The Jaeger Company)

radiocarbon dated at 405 AD at this location. Investigations also revealed subsistence related food refuse, architectural features, floral and faunal remains, and ceramic and lithic artifacts. No evidence of the prehistoric significance of this site remains visible in the landscape today.

Riverbank erosion has long been a threat to the site. Steep banks make up the shoreline along much the site's western boundary (figure 3.15). Along the southern portion of the western boundary, a recent attempt at shoreline stabilization appears to be failing (figure 3.16). This shoreline stabilization is a work in progress with initial phases of riprap installation followed by installation of vegetative stabilization.

Circulation. The Mallards Dozen site encompasses a band of shoreline located just north of Hampton Place. No formal access to



Figure 3.12: Wood posts at Hampton Place site, 2012 (The Jaeger Company)



Figure 3.15: Riverbank erosion at Mallards Dozen site, 2012 (The Jaeger Company)



Figure 3.13: Various signs at Hampton Place site, 2012, (The Jaeger Company)



Figure 3.14: Chain link fence at Hampton Place site, 2012 (The Jaeger Company)



Figure 3.16: Shoreline stabilization efforts at Mallards Dozen site, 2012 (The Jaeger Company)

the site exists. Access is via a utility corridor located east of Hampton Place, or by following the river shoreline north from Hampton Place. The Blue Blazes Trail also provides access to northern portions of the site.

Vegetation. Vegetation at the site consists of floodplain forest, with a dense understory of privet. The effect of the existing vegetation on the archeological resources is unknown.

Vulcan Site

The Vulcan site (40HA140) contains buried archeological remains from the Archaic and Woodland periods including a Late Archaic period house dated to 1335 B.C. Archeologists consider this house as one of the earliest formally built dwellings in the southeastern

United States. Archeology also revealed pottery shards, indicating a later Middle/Late Woodland period village at this location.

The Vulcan site is located north of the Mallards Dozen site along the riverbank. The site makes up the western boundary of the Blue Blazes Trail property, located between the river and a utility corridor. A portion of the Vulcan site lies on Moccasin Bend Golf Course property. No evidence of the archeological site is apparent in the landscape today.

Circulation. The Blue Blazes Trail passes through the Vulcan Site near the midpoint of the trail and provides access to the site.

Vegetation. The majority of the vegetation at the site consists of degraded floodplain forest, with a dense understory of privet. This site also encompasses the southwestern tip of the golf course, which is a highly maintained landscape consisting of closely mown turf, ornamental trees, and shrubs. In addition, a utility corridor passes through this location. The corridor is kept open with annual maintenance and is primarily covered by warm season grass species and successional woody species. The effect of the existing vegetation on the archeological resources is unknown.

Views. A utility corridor provides an opening in vegetation along the riverbank affording views of the opposing shoreline and mountain ridge (figure 3.17).

Structures. A large metal sign mounted on poured concrete footings is adjacent to the river in this location (figure 3.18). The sign provides information related to the forced main utility that crosses the river here. The sign warns passing boats not to anchor or dredge in the area. The sign is functional and legible but in poor condition due to rust. The impact of the sign to buried archeological resources is unknown.



Figure 3.17: Views to opposite bank of Tennessee River from Vulcan site, 2012 (The Jaeger Company)



Figure 3.18: Large metal sign at Vulcan site, 2012 (The Jaeger Company)

Woodland Mound Complex

There is a grouping of conical mortuary mounds located at the southern tip of Moccasin Bend on the Moccasin Bend Mental Health Institute grounds. Archeological investigations conducted in 1915 partially excavated portions of the mounds. The mounds are associated with ceremonial and burial practices of the Late Woodland period. The mounds represent the most noteworthy mortuary center from this period in the area. Historic coffins (possibly of Union Army casualties during the Civil War) exist in one of the mounds. The exact number of mounds is currently unknown and there is some discrepancy among recent studies as to the

exact number of mortuary mounds within the Woodland Mound complex. Alexander states in his report, “there is general confusion on the site forms as to the correspondence of the five mounds described by Moore [1915 archeological investigation].” He states his belief that one mound was destroyed in the construction of part of the mental health institute.¹⁷

Access to these mounds is extremely limited due to hospital security concerns. The study team was unable to access this site. One of the mounds was apparent from adjacent NPS-owned property (figure 3.19). Initial development of the hospital appears to have been sensitive to most of the mound locations; however, there is no clear picture of the area’s topography prior to development. Construction documents for the hospital may or may not include an existing conditions map of the property, which if it exists, would shed some light on the condition and location of the mounds prior to the hospital’s development on the site. Such plans were not located as part of this study. The current condition of the mounds could not be determined due to their inaccessibility.

Brown’s Homestead and Ferry Sites

The Calhoun Treaty between the United States Government and the Cherokee in 1818–1819 ceded land north of the Hiwassee River and north and west of the Tennessee River to the United States and moved the Cherokee people south of the Tennessee and Hiwassee rivers. The treaty gave Cherokees in good standing the right to claim some land north of the Tennessee River, and several Cherokees claimed 640-acre reservations. John Brown, a man of Cherokee lineage, claimed a reservation on the Bend on land that now makes up the northern portion of the study area.

¹⁷ Alexander, 141.

A local surveying company, Hopkins Surveying Group, performed deed research and mapped the extent of John Brown’s reservation for the National Park Service and the Friends of Moccasin Bend National Park in 2012 (figure 3.20). This map shows that the original southern boundary is still intact and now serves as the property line separating the Moccasin Bend Golf Course from the Moccasin Bend Wastewater Treatment Facility. A portion of the northern boundary is still in use today, outside of the study area. The Old Federal Road tract, now owned by the National Park Service, was once a part of Brown’s reservation on Moccasin Bend.

John Brown operated Brown’s Ferry, an important river crossing connecting Moccasin Bend to the eastern bank of the Tennessee River along the Old Federal Road. His reservation also contained portions of the Federal Road and a dwelling located along the Federal Road. On the opposite side of the river, John Brown built an inn called Brown’s Tavern. The tavern is a two-story log structure with a porch that runs the entire length of the first floor. Two stone chimneys anchor each end of the building (figure 2.10). Brown’s Tavern is located on private property outside the study area. The condition of the tavern is unknown.

Aside from Brown’s Tavern, few features remain within the NHL landscape from John Brown’s time on Moccasin Bend. The route of the Federal Road through NPS-owned property is not discernible today; however, archeological investigation would likely be able to locate its course. The site of John Brown’s dwelling is believed to be located on a high point on the Moccasin Bend Wastewater Treatment Facility property. The Moccasin Bend Wastewater Treatment Facility also contains the easternmost portion of Brown’s Ferry. From a cleared area on the Old Federal Road tract, both of these sites are visible today. The ferry site on the opposite shore of the river is also observable from here. This site is privately owned, and minimally developed. The pass through the hills, located west of the westernmost portion of the ferry crossing,

appears much as it did in the late 1800s (figure 3.6). Of all these important resources, only the route of the Federal Road occurs on property currently owned by the National Park Service.

Brown's Ferry was used during the forced removal of the Cherokee from the region in 1838. Two separate detachments of Cherokee Indians passed through this site as they travelled across Moccasin Bend on the way to the Oklahoma Territory.

Brown's Ferry also played an important role during the Civil War. After capturing the ferry from the Confederates in 1863, the Union Army used it and the Federal Road to move supplies from Nashville to Chattanooga.

Civil War Sites along Stringers Ridge

The existing Civil War sites at the southern tip of Stringers Ridge are the best preserved of all the physical remains from the Battles for Chattanooga, and the only surviving features from that engagement associated with Union Army activities.¹⁸ The union army occupied these sites in the early stages of the battles from August to September 1863 when Confederate forces occupied Chattanooga and from September to November 1863, following the Battle of Chickamauga when Union forces were under Confederate siege in Chattanooga.

Investigations to date identified the following sites associated with various Union Army artillery and rifle positions on Stringers Ridge: 10th Indiana Artillery Battery Positions, Whitaker's Brigade Camps, 18th Ohio Artillery Battery Position, Infantry Regimental Camp, and an Unfinished Artillery Parapet. The "Structures" subsection at the end of this section describes the condition of each of these features in detail.

18. White Star Consulting, "Preservation and Interpretation Plan For Civil War Resources Located At Moccasin Bend National Historic Landmark, Chattanooga, Tennessee." (Mount Pleasant, TN: White Star Consulting, 1998): 73.



Figure 3.19: Limited view of woodland mound site, 2012 (The Jaeger Company)

Circulation. A road system associated with the Civil War sites still exists at Stringers Ridge. Historic maps and photographs depict these roads. The roads are earthen and are likely to be in better condition today than during the Civil War, due to lack of use (figure 3.21). During the war, these roads would have been heavily used by both soldiers and horse-drawn vehicles and would probably have been cut up by animal hooves and rutted by wagon wheels.¹⁹ The historic roads are in generally good condition with little evidence of erosion, outside of a few isolated locations in the lower areas.

Vegetation. Vegetation in the area consists of a mature oak-hickory forest. White oak, chestnut oak, mockernut hickory (*Carya tomentosa*), and shagbark hickory (*Carya ovata*) are common canopy tree species. Understory and shrub species include poison ivy, brambles, deciduous azaleas, mountain laurel, and blueberry. There is no evidence of logging or other manmade disturbance except for the Civil War resources.²⁰ In Civil War-era photographs taken from Lookout Mountain, Stringers Ridge appears much as it does today, covered in woodland. During the Civil War, Federal troops would have cleared some of the forest directly in front of their firing positions in order to provide a clear field for firing; however, these photographs clearly show that the woods on Stringers Ridge were not clear-cut during the war.

19. Ibid.

20. Ibid.



Figure 3.20: Survey of John Brown Reservation site, 2012, (Hopkins Surveying Group)

In 1998, White Star Consulting completed a study of the Civil War resources on Stringers Ridge for the Friends of Moccasin Bend. According to this report, “as much vegetation as possible would have been left in place, to provide concealment for Federal positions, and to provide shade for the soldiers.”²¹ A large horseshoe shaped swath of clear-cut land is visible in historic photographs from the Civil War in an area that now consists of forest. Figure 2.17 and figure 3.7 provide photo

21. Ibid.

comparison of the vegetation condition during the Civil War and the vegetation condition today.

Views. During the Civil War, the Union Army cleared the following locations:

- from three artillery positions atop knolls, to the south and in the direction of Lookout Mountain
- from two artillery positions atop the easternmost knolls to the east and in the direction of Chattanooga

- from the two westernmost artillery positions, to the west and in the direction of Brown's Ferry and the Tennessee River
- from the south central, two-gun artillery positions to the southwest and southeast²²

Evidence of only one of these historic viewsheds is evident in the landscape of Stringers Ridge today. Located at southernmost of the two easternmost knolls is a large clearing associated with a City of Chattanooga Police Department Communications tower. The tower is located near the remains of the 10th Indiana Artillery Position. While the current view differs from the historic one, this location provides the only view of Chattanooga and the Tennessee River from Stringers Ridge. From this vantage point, it is possible to imagine the view Union soldiers would have experienced during the war. Mature trees partially obscure and filter the view today, but it is still impressive (figure 3.3). The view is best in winter, as deciduous trees limit the view during the growing season.

Structures. White Star Consulting revised their 1998 report in 2006. The following information about the Civil War resources on Stringers Ridge resources was informed by their study and observations made during fieldwork in winter of 2012.

10th Indiana Artillery Battery Positions – This site contains two separate positions on the easternmost knobs of Stringers Ridge. The farthest east knob contains two sections of earthworks and the south central knob contains a section of earthworks. The farthest east knob consists of two gun positions with two embrasures that face east and the degraded remains of an artillery lunette. White Star Consulting surmises that the two-gun position originally contained two 12-pounder howitzers. Tree cover protects the remains of the two-gun position today (figure 3.22). A thick layer of leaf litter covers the position and trees of various ages are growing on the works.



Figure 3.21: Civil War era road trace, 2012 (The Jaeger Company)



Figure 3.22: Tree cover protecting the remains of the two-gun position, 2012 (The Jaeger Company)

These features are in good condition today, but as the trees continue to grow in the works, they will become increasing threats to these resources.

To the south of this gun position lie the degraded remains of an artillery lunette. The City of Chattanooga constructed a communications tower in this location in the 1970s, effectively destroying the lunette. The lunette is in poor condition. The large metal communications tower remains in the landscape. This site contains the only view of Chattanooga and the Tennessee River visible from Stringers Ridge. Missionary Ridge is also visible in the background from this vantage point.

The other two-gun position is approximately 200 yards west of the first position, near the top of the south central knob of Stringers Ridge (figure 3.23). This complex contains a middle position for two large guns and two embrasures facing in the direction of Lookout Mountain. The remains of two rifle pits located to the east of the artillery position

22. Ibid. 73-74.



Figure 3.23: Civil War-era two-gun position, 2012 (The Jaeger Company)

also exist in the landscape, along with what probably is the collapsed remains of an earth and wood powder magazine. The two-gun position is well protected by tree canopy and covered by a thick layer of leaf litter. Trees of varying age are growing in the works, threatening to damage them in time. The position is in fair condition. Both embrasures show signs of erosion. The embrasure that faces southeast is seriously eroded and wildlife appears to be using a portion of it as a trail. This embrasure is in poor condition. The other embrasure is less eroded and in fair condition. The collapsed powder magazine is in fair condition as well.

Whitaker's Brigade Camps— The remains of three camps exist on Stringers Ridge. The first is located along the ridgeline that runs between the two 10th Indiana Artillery Battery positions. On the northern slope of the south central knob are the remains of a second camp. The remains of a third camp are to the northwest of the two-gun position on the farthest east knob. The camps exist in the landscape in the form of remnant hut pads that are visible along the slopes. The condition of the camp remains is fair.

18th Ohio Artillery Battery Position – The 18th Ohio occupied two separate artillery locations on the two western knobs of Stringers Ridge. The artillery position located on the farthest south of the two knobs is the most impressive earthwork remaining on Moccasin Bend.

This large and well-preserved complex features the remains of two separate works, a six-gun battery and a two-gun battery built after the six-gun battery (figure 3.24) as well as remnant hut pads from an associated Federal army camp. Mature forest canopy protects this remarkable artillery fort and a thick layer of leaf litter covers the earthworks. The earthworks contain trees of varying ages growing in them. Several older trees are in decline and could potentially damage the works through tree throw or death. Minor erosion is also visible at some points along the works. The condition of the earthworks at this location is fair because of these impending threats to the resource.

The remains of another two-gun position exist on the northernmost of the two western knobs. This position features two clear embrasures. Since no evidence of a camp exists near this site, it is possible that it was a supplemental or interim artillery position. Mature forest canopy protects this position and leaf litter covers the earth works. Two large trees are growing in one of the works and could potentially damage them (figure 3.25). This artillery position is in fair condition due to the danger associated with the large trees growing within the earthworks.

Infantry Regimental Camp and Unfinished Artillery Parapet – North of the other camps and entrenchments on Stringers Ridge are the remains of an infantry camp and an unfinished artillery parapet. On the western slope of the next knob north of the positions associated with the 18th Ohio Artillery Battery are the remains of the infantry camp. North of the road network is a single rifle pit, presumed to be a sentry post for the camp. The unfinished artillery parapet lies at the top of the same knob, following the ridge. The parapet faces south. These features are in poor condition compared to the other earthworks on Stringers Ridge as they are unfinished and suffering from erosion.

OTHER MOCCASIN BEND PROPERTIES

Moccasin Bend Mental Health Institute

The Moccasin Bend Mental Health Institute (hospital) is composed of five clusters of buildings and two detached residences located on the southern end of the project area. Due to security and privacy concerns, this property was not accessible to the project team.²³

Based on discussions with the NPS staff and views of the hospital from adjacent NPS-owned properties, it is apparent that many buildings are unused. Three of the five building clusters appear vacant, and only one of the residences appears occupied. The grounds consist of regularly mown lawns around the buildings with seasonally mown fields of fescue and warm-season grasses occupying outlying areas. A mixture of evergreen and deciduous ornamental specimen trees punctuates the mown areas of the site, mostly in and around the building clusters. Chain link fence covered in invasive nonnative vines encloses the southern portion of the property along the river. Forested areas, primarily owned by the National Park Service, enclose the northern side of the property. A small, wooded portion of high ground surrounds the southeastern cluster of buildings located at the extreme southern tip of Moccasin Bend. This area of forest occurs within the hospital's property boundary. The federal government (National Park Service) maintains a shoreline easement that runs the entire length of the riverbank at the Moccasin Bend Mental Health Institute's southern property line.

The state of Tennessee constructed the first unit of the hospital in 1961 (figure 3.27). This complex of buildings is the largest on the property and occupies a prominent site at the end of Moccasin Bend Road. Over the years,

23. High-resolution orthophotography flown in 2010 and provided to the project team by Hamilton County, TN, was used to aid in the description of this property.



Figure 3.24: Civil War-era battery complex, 2012 (The Jaeger Company)



Figure 3.25: Trees growing into Civil War-era earthworks, 2012 (The Jaeger Company)



Figure 3.26: Moccasin Bend Mental Health Institute, 1961 (CHCBL Collection, #00004997)

the hospital has expanded outward from this central cluster, developing smaller groups of buildings on the periphery. These clustered facilities are accessible via a system of two lane roads and surface parking lots (figure 3.28). The road leading to the northwestern building complex follows an old farm road visible on USGS maps dating from the 1950s (figure 3.26).



Figure 3.27: Moccasin Bend Mental Health Institute, 2010 (Bing Maps)

A local architect, Mario Bianculli, designed the majority of the buildings at the Moccasin Bend Mental Health Institute. Considered “Chattanooga’s First Modernist,” Bianculli was a pioneer of modern architecture in Tennessee and the southeastern United States.²⁴ The influence of modernists, such as Josef Hoffmann, Ludwig Mies van der Rohe, and Le Corbusier, is apparent in Bianculli’s designs. The work of Mies van der Rohe is perhaps the most obvious influence on the hospital buildings as Bianculli employed a grid of steel to support expanses of brick and glass, similar the design a year earlier by Mies van der Rohe for Siegel Hall at the campus of Illinois Institute of Technology.²⁵ Many of the hospital buildings employ this method of construction, and most feature steel, brick, and glass (figure 3.29). For the most part, the buildings on the hospital campus are consistent in material, design, and style. Even the two smaller residence buildings and the site entrance signs feature the same materials and details as the larger hospital buildings, creating a unified campus (figure 3.30).

24. Gavin Townsend. *ARRIS : The Journal of the Southeast Chapter of the Society of Architectural Historians*, “Chattanooga’s First Modernist,” Volume 21, 2010.

25. Ibid

Many of the buildings at the Moccasin Bend Mental Health Institute are vacant and/or in need of repairs. While the condition of individual buildings varies from good to poor, overall the condition of the complex at Moccasin Bend Mental Health Institute is fair.

A complex of American Indian mounds exists on the eastern side of the hospital property. One of the mounds in this complex is located on NPS-owned property. A second mound located on the hospital property is visible from the NPS property. This mound complex is a component landscape and discussed in detail earlier in “Existing Conditions.” NPS staff noted that the grading and construction of the hospital buildings appears to have minimized impact to the adjacent mounds. The extent of impact on the mound complex cannot be determined at this time due to a lack of available documentation. Despite these impacts, the presence of the mental health institute may have provided inadvertent security for the Woodland mound complex. Public access to these sites is extremely limited due to hospital security measures.

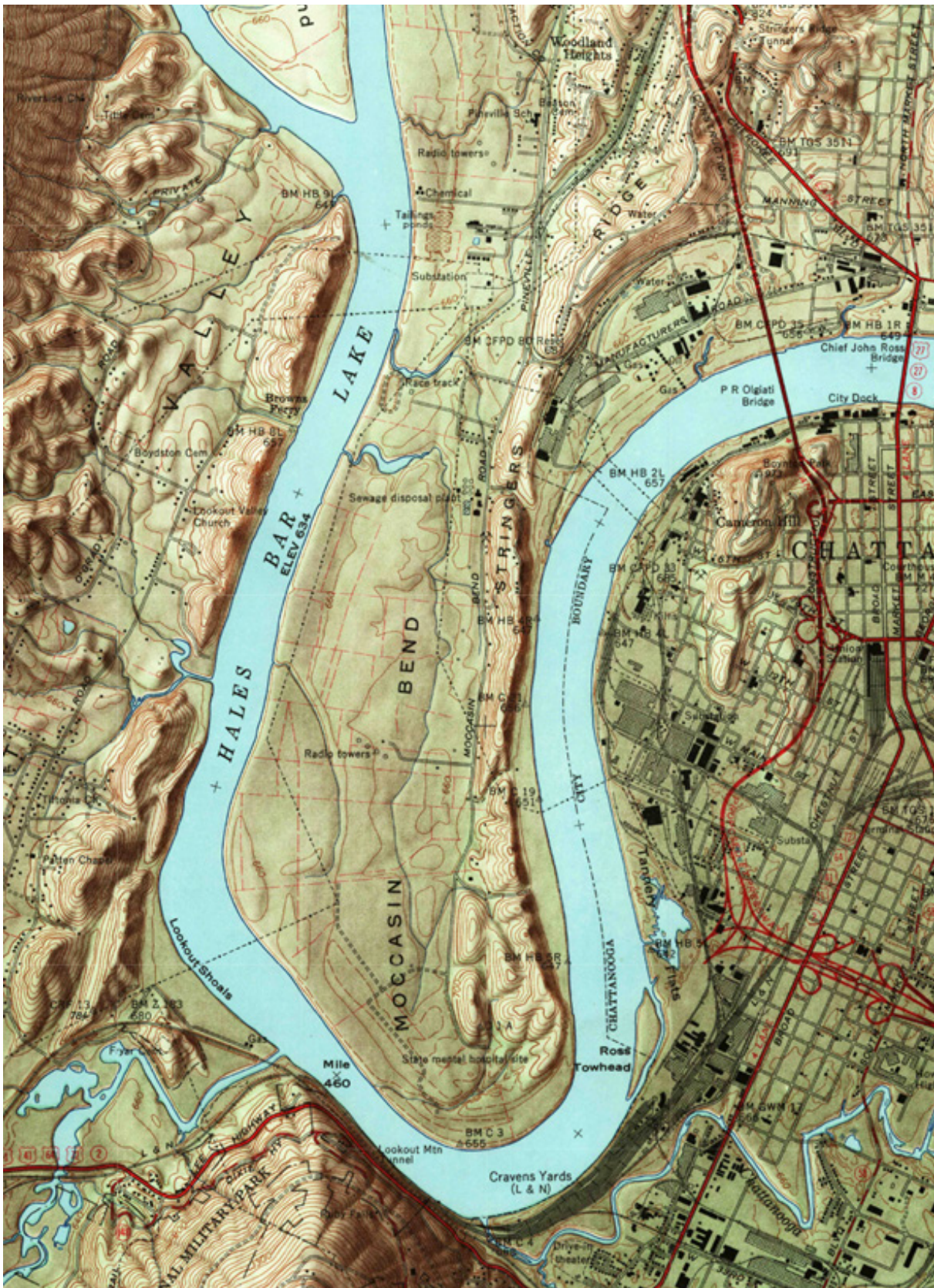


Figure 3.28: 1958 USGS map showing location of old farm road, 1958, (US Geological Survey)



Figure 3.29: Main building at Moccasin Bend Mental Health Institute, 2009, (Gavin Townsend)

Former Model Airplane Facility

A former model airplane facility is located on the west side of Moccasin Bend Road just north of the gates to the Moccasin Bend Mental Health Institute. The City of Chattanooga and Hamilton County jointly own this property. The parcel consists of nearly 14 open acres.

Evidence of the former use is obvious in the open field, remnant asphalt runway, two open-air wooden structures and several remnant signs (figure 3.31 and figure 3.32). A single-lane road connects with Moccasin Bend Road and provides access to the interior of the property. Portions of this access road are paved with asphalt, but the majority of the road surface is unimproved. A swinging metal livestock gate restricts entry to the site.

The open field contains early successional vegetation such as pines, broomsedge, and brambles. There are also a few sycamore pioneers. This property is located along the southern portion of dredge spoils site, the boundaries of which are obvious in the topography.

Private Residence along Moccasin Bend Road

A privately owned, single-family residence is located across from the former model airplane facility on the east side of Moccasin Bend Road (figure 3.33).

NPS-owned property surrounds the entire 8.5-acre parcel except for a 230-foot strip along Moccasin Bend Road at the southwestern corner of the site. Access to the house does not originate from this strip. Instead, a single lane driveway meets Moccasin Bend Road near the center of the property. A portion of this driveway passes through the NPS property before gaining elevation, veering north, and ending at the privately owned home. The house is located approximately halfway up the western slope of Stringers Ridge and faces west. The house and property appear to be in good condition.

The southern half of the parcel consists of forest that is similar in age and composition to the woods that cover the rest of Stringers Ridge, although more pine trees are present here. Vegetation in the northern section of the property consists of occasionally mown lawn with clustered plantings of large pine trees. An overhead utility line traverses the property from north to south between Moccasin Bend Road and the residence.

Law Enforcement Firearms Training Range

The facility is located on the east side of Stringers Ridge and is accessible via a winding road that connects to Moccasin Bend Road through a natural pass in the ridge.²⁶ The site entrance is located just north of the private residence along Moccasin Bend Road. Situated along the river on a flat shelf in the floodplain, this 45-acre property consists of multiple sheds, buildings, towers, parking areas, and other structures for training purposes (figure 3.34). The federal government has a shoreline easement running along the riverbank of this property.

²⁶ Access to this property is restricted. The project team was permitted brief access to the site with NPS Historian, Jim Ogden acting as an escort. High-resolution orthophotography flown in 2010 and provided to the project team by Hamilton County, TN, was used to aid in the description of this property.



Figure 3.30: Residence and entrance sign at Moccasin Bend Mental Health Institute, 2012 (The Jaeger Company)



Figure 3.31: Open-air wooden structures at the former model airplane facility, 2012 (The Jaeger Company)

Figure 3.32: Sign and asphalt remnants at the former model airplane facility, 2012 (The Jaeger Company)

The grounds consist of mown lawn with naturalized vegetation along the water and lawn edges. The undeveloped western boundary of the property consists of wooded slopes that form the eastern face of Stringers Ridge.

Erosion along the riverbank of the property is evident, with the banks of the river undercut severely in places.

Years of use as a firing range have resulted in a buildup of lead in the soils from spent ammunition. As a result, extensive cleanup probably will prove necessary prior to permitting public access to this site.

Blue Blazes Trail

The Blue Blazes Trail is a short loop trail located within the center of the Moccasin Bend National Archeological District, just

north of the entrance to the Law Enforcement Firearms Training Range. This trail was a city/county trail that was established before federal ownership of this property. The trail is named the Blue Blazes Trail because the Sierra Club established a system of blue trail blazes to mark the route. The property is now federally owned and managed.

The trail encircles the WDEF radio towers site and is approximately three miles long. The northern section of the loop follows the southern property boundary of the Moccasin Bend Golf Course and a sewer easement, while the southern portion of the loop travels along the levee of the dredge spoils site. NPS staff members now maintain the trail and have retained the blue blaze trail marking system (figure 3.35).

At the halfway point of the route, the trail crosses an overhead power easement and travels along the eastern bank of the Tennessee



Figure 3.33: Private residence along Moccasin Bend Road, 2010 (Bing Maps)



Figure 3.34: Law Enforcement Firearms Training Center, 2010 (Bing Maps)

River. Much of the trail is low lying and holds water. A wetland area is located to the west of the radio towers site (figure 3.36). The condition of the trail varies from good to poor with many of the low-lying areas difficult to traverse.

A small trailhead is located on the eastern side of the loop, adjacent to the gravel parking area and entry drive (figure 3.37). A basic wooden kiosk offers trail information, lists trail rules and regulations, and provides emergency telephone numbers for visitors (figure 3.38). A wooden sign at the intersection of the

trailhead entry drive and Moccasin Bend Road directs drivers to the trailhead. The sign consists of two four-inch-by-four-inch posts supporting a simple wooden signboard identifying the trail. Mounted on one of the support posts is a carved and painted NPS arrowhead (figure 3.39).

Understory vegetation along the trail consists of dense stands of Chinese privet (*Ligustrum sinense*). The canopy consists of a mixture of native pine and hardwood species. The privet is most dense in areas associated with the dredge spoils pile. The disturbed soils provide ideal condition for this species to thrive.



Figure 3.35: Blue Blazes Trail, 2012 (The Jaeger Company)



Figure 3.38: Wooden kiosk at Blue Blazes trailhead, 2012 (The Jaeger Company)



Figure 3.36: Wetland area along Blue Blazes trail, 2012 (The Jaeger Company)



Figure 3.39: Blue Blazes trailhead sign, 2012 (The Jaeger Company)



Figure 3.37: Gravel entrance road and parking area at Blue Blazes trailhead, 2012 (The Jaeger Company)



Figure 3.40: WDEF radio towers site, 2012 (The Jaeger Company)

WDEF Radio Towers

The WDEF radio towers site contains four amplitude modulation (AM) radio towers and a two-story concrete building surrounded by a large open field (figure 3.40). The site is fenced

and gated on the eastern side and encompasses more than 12 acres. The towers and building are accessible via a gravel drive that extends from Moccasin Bend Road, past the Blue

Blazes Trailhead parking area, and into the site. The National Park Service owns property that surrounds the parcel on all sides.

The four equally spaced radio towers spread over the open field in a diagonal line that runs northwest to southeast across the parcel. Each metal tower is identical and mounted on a large concrete base surrounded by chain link fence. A series of guy wires provide additional support to each tower. The towers are in operation and appear to be in good condition.

A small, two-story utilitarian building is located to the north of the towers at the terminus of the gravel entry drive (figure 3.41). This simple, flat-roofed building likely dates to the 1950s. The building served as the control room and booth for multiple AM radio stations over the years. The current owners use it for storage. While the building is intact, it is in poor condition and deteriorating, with obvious signs of vandalism and neglect.

The dredge spoils site occurs south of this property; as a result, the site's topography is intact.

Moccasin Bend Golf Course

Hamilton County and the City of Chattanooga own the Moccasin Bend Golf Course. HMS Golf, a professional golf course management company, currently manages the course. The property consists of 160 acres, almost all of which are devoted to the 18-hole course (figure 3.42). The Moccasin Bend Wastewater Treatment Facility is located to the north with the NPS-owned Blue Blazes Trail property to the south. The Tennessee River forms the western property boundary and Moccasin Bend Road makes up the eastern property line. A parking lot adjacent to Moccasin Bend Road provides more than 100 parking spaces for golf course users and staff. To the west of the parking lot is a large clubhouse building and two smaller accessory buildings. Additionally, there is a small open-air structure at the rear of the clubhouse. Southeast of the clubhouse



Figure 3.41: Two-story building at WDEF radio towers site, 2012 (The Jaeger Company)

is a maintenance compound that contains an open yard, a gabled roof building, and a large metal Quonset hut. A system of paved golf cart paths crisscrosses and provides access to the interior of the site. At one of the major path intersections, there is a small restroom building. An overhead electrical line crosses the property along the western border near the river. The federal government (National Park Service) maintains a shoreline easement that encompasses the entire western property boundary of the Moccasin Bend Golf Course.

The Moccasin Bend Golf Course is one of the only places within the Moccasin Bend Archeological District where the evolution of the floodplain topography associated with the shifting shoreline of the Tennessee River is intact and perceptible. While the creation of the golf course altered the floodplain topography somewhat, terraces within the floodplain are still evident.

Specimen trees are located along the slopes and transitions between the terraces, as well as being scattered around the course (figure 3.43). A large trapezoid-shaped section of forest is located south of the center of the parcel in a low swampy area. This shape persists as a wooded area in USGS maps dating back to 1936 and historic photographs dating to 1887. Even with the grading associated with the development of this property as a golf course, the topography of this parcel is remarkably intact.



Figure 3.42: Aerial view of Moccasin Bend Golf Course, 2012 (Bing Maps)

Five small ponds are scattered throughout the golf course, along with drainage ditches that connect the ponds to one another and help to drain the property. The largest of these trenches is located at the southwest corner of the site. This waterway is the northern outfall of the slough that divides the “heel” of the moccasin from the remainder of the Bend. Stream bank erosion is evident at hole 13 of the course, especially during periods of high water.²⁷

Moccasin Bend Wastewater Treatment Facility

The Moccasin Bend Wastewater Treatment Facility currently occupies 184 acres immediately north of the Moccasin Bend Golf Course.²⁸ The City of Chattanooga developed the site as a wastewater treatment plant in 1961

27. “Moccasin Bend Tennessee: Draft Cooperative Management Plan and Environmental Assessment.” 8.

28. Access to this property is restricted. High-resolution orthophotography flown in 2010 and provided to the project team by Hamilton County, TN, was used to aid in the description of this property.

and that use continues today. The plant is a major regional treatment facility that processes both liquids and solids 24 hours a day, 365 days per year.²⁹ Buildings, structures, and the equipment necessary to process wastewater material occur throughout the site, with the most densely developed zone located on the eastern half of the parcel, adjacent to Moccasin Bend Road. A system of paved and unpaved roads of varying widths provides vehicular access throughout the property, with wider paved roads occurring in areas of dense development. Narrow, unimproved roads provide access to the perimeter of the property and the less developed portions of the site (figure 3.44). The federal government (National Park Service) holds a shoreline easement that runs along the entire western property line.

Vegetation is sparse, as most of the parcel consists of mown grasses devoid of trees. A section of woods does surround a large natural pond located in the northwestern corner of

29. City of Chattanooga. <http://www.chattanooga.gov/public-works/waste-resources/interceptor-sewer>.



Figure 3.43: Moccasin Bend Golf Course, 2012 (The Jaeger Company)

the site. An additional expanse of forest is located in the southeastern portion of the property. The same flood plain terracing that is visible on the Moccasin Bend Golf Course, occurs in this forested area, though it is not as noticeable due to the density of the vegetation.

The Moccasin Bend Wastewater Treatment Facility contains the Brown's Ferry and Farmstead sites. Riverbank along the southern edge of the Old Federal Road tract provides a glimpse into these sites. NPS staff currently uses this location for interpretation related to the Brown's Ferry and Farmstead sites. NPS staff cleared undergrowth to improve visibility and access to this portion of the property (figure 3.45).

From the bank, it is possible to see the highpoint that probably was the site of Brown's home. It is now a storage area for the treatment facility (figure 3.46). Downstream it is possible to see the ferry crossing sites on both sides of the Tennessee River (figure 3.47).

A section of the federal road system led to Brown's Ferry and past the site of Brown's home. This road and landing were used to remove the Cherokee from the Chattanooga area. Union troops also used Brown's Ferry during the Civil War. The exact location of Brown's Ferry and precise route of the Federal road trace is unknown.

Old Federal Road Tract

Consisting of approximately 98 acres of NPS-owned property immediately north of the Moccasin Bend Wastewater Treatment Facility, this parcel makes up the northwestern corner of the study area. The property stretches from Moccasin Bend Road west to the east bank of the Tennessee River. The federal government (National Park Service) acquired the property in 2003 from a company that specializes in producing corrugated and consumer packaging and recycling solutions, called Rock-Tenn. In the 1950s, a locally popular vehicular racetrack, known as the Moccasin Bend Speedway, operated on a portion of the site. The entire parcel was once part of the John Brown Reservation. A portion of the federal road probably also crosses this site, though mapping of the exact route is currently underway.

Today, access to the Old Federal Road tract is at Moccasin Bend Road immediately south of the junction with Manufacturers Road. An unpaved service road leads from a gate at the road throughout the property (figure 3.48). Much of this roadway follows utility corridors, which crisscross the property's interior. A 20th-century home site is located half way between the road and the river to the west (figure 3.49). Remnants of building foundations, a swimming pool or pond, a patio, and garden varieties of vegetation, such as nandina (*Nandina domestica*), English ivy (*Hedera helix*), periwinkle (*Vinca minor*), and Southern magnolia (*Magnolia grandiflora*) persist.

Further southwest, remaining concrete retaining walls and the supports for a set of bleachers from the Moccasin Bend Speedway site are evident (figure 3.50). The oval track is also apparent in the surrounding topography, which consists of earthen berms in the general shape of a racing oval.

A large drainage slough winds through the property from northeast to southwest. Water also tends to collect in the depression left by the old speedway track. These areas contain



Figure 3.44: Moccasin Bend Wastewater Treatment Facility, 2010 (Bing Maps)



Figure 3.45: Cleared undergrowth at NPS interpretive site, 2012 (The Jaeger Company)

typical wetland vegetation such as cattail, sedges, and rushes. Most of the site is covered in mixed hardwood and pine forest, with invasive nonnative species such as Chinese privet and Japanese honeysuckle (*Lonicera japonica*) forming a dense understory layer beneath the trees. The many utility corridors crossing the parcel consist of regularly mown warm season grasses. Pockets of early successional vegetation occur along



Figure 3.46: Probable site of Brown's home, 2012 (The Jaeger Company)

the earthen service road. Species such as broomsedge, sumac, and pines are common in these areas.

Interpretive Center Tract

This 10.5-acre site is located at 10 Hamm Road, at the northeastern boundary of project area. Surrounded by various parcels dedicated to industrial uses, the site is not contiguous



Figure 3.47: Brown’s Ferry site on the river’s eastern bank, 2012 (The Jaeger Company)



Figure 3.49: Figure 3.50: Remnant concrete wall, 2012 (The Jaeger Company)



Figure 3.48: Gated access road and utility corridor at Old Federal Road tract, 2012 (The Jaeger Company)



Figure 3.50: Remnant concrete wall, 2012 (The Jaeger Company)

with any other NPS-owned property on the Bend. The property is an agricultural/grazing tract (figure 3.51).

The site is partially enclosed by Stringers Ridge to the south with overhead power transmission lines bordering the site to the north. The site stretches along a slight bend in the Tennessee River, allowing for long views upstream towards downtown Chattanooga and downstream towards Interstate 24, Lookout Mountain, and an industrialized area of the city. Bordered by Hamm Road to the west and the Tennessee River to the east. Along the Tennessee River frontage, the site jogs to include a 50-foot vegetative buffer in private ownership comprised largely of invasive nonnative species. The interior of the site is open field almost entirely void of trees (figure 3.52).

The majority of the property consists of fill, added to the property by its former owner, Pete Serodino, in order to raise the site above the 100-year floodplain. Because the entire parcel is covered with fill that is unlikely to contain archeological resources, this parcel became the preferred site for the development of a NPS interpretive center for the Bend. Site analysis and environmental assessment, performed during the “Development Concept Plan/Environmental Assessment of Effects” prepared as part of the planning process for the development of the interpretive center, identified that no cultural or natural resources would be adversely impacted by development on this parcel. The center is currently in the schematic design phase (figure 3.2).



Figure 3.51: Interpretive Center tract, 2010, (Bing Maps)

ETHNOGRAPHIC RESOURCES

National Park Service via Director's Order 28 defines ethnographic resources as any "site, structure, object, landscape, or natural feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it." Ethnographic studies have not been undertaken at Moccasin Bend to date. Accordingly, ethnographic resources have not been recorded on the Bend. The current effort to complete a cultural landscape report for the Bend does not include an ethnographic investigation component. However, archeological studies conducted at Moccasin Bend indicate great potential for defining ethnographic resources within the study area. The potential presence of such resources has great bearing on the future use and management of known American Indian sites at Moccasin Bend especially at the village site and at the Brown's Ferry site and its connection with the Trail of Tears.



Figure 3.52: Looking south on the Interpretive Center tract, 2012 (The Jaeger Company)

ANALYSIS AND EVALUATION

INTRODUCTION

This chapter provides an analysis of the integrity and physical character of the landscape associated with the study area at Moccasin Bend. Using the methodology and criteria developed by the National Register of Historic Places, this analysis discusses the status of the cultural landscape, including a review of the physical and historic integrity of the landscape features that contribute to the historic significance of the site. By comparing the history of the site with the existing conditions, discussed in previous chapters, the evaluation of integrity identifies features that continue to convey their historic significance. Because a cultural landscape is an accumulation of features that individually or in combination contribute to the historic significance of a property, the evaluation of integrity benefits from considering a landscape as a continuum through history.

NATIONAL REGISTER STATUS

The National Historic Preservation Act of 1966 authorized the National Register of Historic Places, which is the official list of the nation's historic places worthy of preservation. The National Register of Historic Places coordinates and supports public and private efforts to identify, evaluate, and protect America's historic and archeological resources. To achieve national register status, a property must meet the national register criteria for evaluation. This evaluation examines a property's age, integrity, and significance. For the national register to consider a site as historic, a property generally should be at least 50 years old. To possess integrity, a property needs to appear the way it did in the past, and it must be associated with important historical events, activities, or developments. The national register evaluates a property's significance based on the following criteria:

- A. Association with events that have made a significant contribution to the broad patterns of our history; or
- B. Association with the lives of persons significant in our past; or
- C. Embodiment of the distinctive characteristics of a type, period, or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Yielding or potential to yield information in history or prehistory.

In May 1984, the National Register of Historic Places added the "Historic Resources at Moccasin Bend" to its list. The national register nomination names three individual sites (the Vulcan site, the Mallards Dozen site, and the Hampton Place site), an archeological district composed of seven burial mounds, and a historical district containing seven individual sites (the Stringers Ridge Civil War earthworks). Additionally, in September 1986, Moccasin Bend National Archeological District gained the designation of a National Historic Landmark.

STATEMENT OF SIGNIFICANCE

According to the national register nomination form for the Moccasin Bend National Archeological District, the area "qualifies for designation as a National Historic Landmark under the themes of 'The Original Inhabitants' . . . and 'Major American Wars.'"¹ Subthemes for the Original Inhabitants theme include: A5, The Earliest Americans: Archaic; B8, Native Villages and Communities: southeast; C1, Contacts of Native and Nonnative Peoples; C2a, Native Cultures at the time of Contact; C2b, Changes in Native

1. National Register of Historic Places, Moccasin Bend National Archeological District, Chattanooga, Hamilton County, Tennessee, National Register #86003510.

Life Due to Contact; and F3, Aboriginal Technology: Trade. The subtheme for Major American Wars is D4, The Civil War in the West. The nomination continues, “even as presently known, this is the best preserved and most important compact, diverse sample of archeological remains known in the Tennessee River Valley.”²

Moccasin Bend possesses exceptional importance derived from American Indian occupation between approximately 10,500 BC and AD 1760 (the Paleo-Indian period through the European contact period). Archeological resources at the Bend are extremely important and continue to provide a wealth of information related to all areas of American Indian life from architecture, technology, and social traditions to subsistence, habitation, trade, and mortuary traditions both at Moccasin Bend and throughout the Tennessee Valley. In 1838, the United States government used the federal road system in the forced removal (now known as the Trail of Tears) of Cherokee people from the Tennessee Valley, including the Chattanooga area. A portion of this road crosses Moccasin Bend. Many American Indian burials have been identified at the Bend. Both the presence of burials and a long history of ancestral occupation make the Bend an important site for many contemporary American Indian tribes. The Civil War earthworks located along Stringers Ridge played an important role in the Battle of Chattanooga. These earthworks represent some of the best-preserved fortifications left from the battle.

According to national register criteria for assessing significance, Moccasin Bend is significant under criteria A, C, and D. Under criterion A, the property is associated with important events of the prehistoric period, the European contact period, the forced removal of the Cherokee, and the events of the Civil War related to the Battle of Chattanooga. Under criterion C, the unique and intact American Indian sites provide many unique examples of town planning, architectural

² Ibid.

styles, and construction methods representing numerous periods of development. Moccasin Bend is significant under criterion D based on recovered prehistoric and historic information. Archeological investigation at Moccasin Bend also indicates great potential for substantial future discoveries, particularly in the realm of prehistory.³

Analysis of the cultural landscape suggests the period of significance for Moccasin Bend spans from the Paleo-Indian period to the end of the Civil War (10,500 BC–1865 AD). Many existing landscape features contribute to this broad period of significance, including the prehistoric and historic periods. Managers may determine some additional individual resources within the project area as eligible for the national register. Because the national register does not currently list these resources, they do not contribute to the identified period of significance.

LANDSCAPE INTEGRITY OVERVIEW

The National Register of Historic Places specifies seven defining qualities of integrity. These include location, design, setting, materials, workmanship, feeling, and association. For inclusion in the national register list, a property’s historic identity will be evident because of the survival of physical characteristics dating from the period of significance. This section evaluates the physical integrity of landscape features by comparing the historic condition of features dating to the periods of significance with the current condition of these features. The section classifies features as either contributing or noncontributing to the overall historic significance of the study area at Moccasin Bend.

³ At present, there is no definitive evidence of contact with important European explorers, such as DeSoto and Prado; however, past archeological studies have discovered a large amount of Spanish objects at the Hampton Place site. Many speculate that these expeditions may have passed through Moccasin Bend. Future discoveries may make the site significant under criterion B as well.

The periods of significance for the landscape selected in the 1984 nomination were the prehistoric period, 1500–1599, and 1800–1899. The national historic landmark nomination from 1986 expanded the periods to include prehistory through 1899.⁴ The wide date range is appropriate due to great potential for new discoveries within the prehistoric period, but the historic period should be refined to end at the close of the Civil War in 1865. Development after the Civil War (post-1865) within the study area does not contribute to the periods of significance. Within these broad periods, there are generally seven periods of development:

- the Paleo-Indian period (10,500–8000 BC)
- the Archaic period (8000–700 BC)
- the Woodland period (700 BC–AD 1000)
- the Mississippian period (AD 1000–1630)
- American Indian and European contact period (1513–1760)
- Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal period (1760–1860)
- Civil War period (1861–1865)

This cultural landscape report uses these seven periods in the evaluation of historic integrity. Landscape elements identified for analysis include natural systems and features, cultural features, component landscapes, other Moccasin Bend properties, and ethnographic resources. Natural systems and features include aspects, such as topography, hydrology, and vegetation. Cultural features include various elements, such as land use and circulation. The cultural landscape report examines several component landscapes in detail. Component landscapes include the Hampton Place site, the Mallards Dozen site, the Vulcan site, the Woodland Mound complex, the Brown's Homestead and Ferry sites, and the Civil War sites along Stringers

4. Standard periods of significance on national register nomination forms include century-long ranges (e.g., 1800-1899).

Ridge. The analysis considers the following categories as applicable within the component landscapes: circulation, vegetation, views, structures, and small-scale features. To the degree possible, the cultural landscape report briefly analyzes other Moccasin Bend properties.⁵ To the extent possible, the cultural landscape report assesses ethnographic resources, although many of these remain currently undefined.

NATURAL SYSTEMS AND FEATURES

Physiography, Geology, and Soils

Physiographic and geologic features at Moccasin Bend include a long linear limestone and shale ridge, deep residual and alluvial soils, a rich terraced flood plain, and a natural passageway created by a gap through the mountains. These features, along with the protection offered by the surrounding mountains and wide Tennessee River and the abundance of fresh water necessary for farming and occupation led to a long history of use of Moccasin Bend. American Indians occupied the site and established villages, including burial grounds. Civil War soldiers stockpiled supplies and used the important geographic location as a strategic fortification. In the 20th century, the site has served for both industrial and agricultural purposes.

The construction of the mound complex found at the current mental health institute site likely required extensive prehistoric excavations. Presumably, excavated soils from adjacent areas created these features. Archeology to date does not provide the exact location of the soil excavation. The limited documentation of these mounds does not provide a definitive construction/soils profile.

5. These resources represent contemporary landscape developments and/or private properties that were not fully accessible to this study. The resources were deemed unlikely to contain significant historic landscape resources, which is not to say that prehistoric deposits may not lie below.

After the period of significance, two major fill projects were undertaken—the river channel-widening project that created the dredge spoils pile and the project to add fill to the Interpretive Center tract. Both projects added tons of soil into new contexts. Each probably had differing effects on the underlying soils. Evidence suggests that the project at the Interpretive Center tract began with the removal of the topsoil layer, thereby removing layers of the archeological record. Creation of the dredge spoils pile did not remove layers of the profile, but likely influenced the underlying soils by capping them and continuously infiltrating water through the profile as the slurry soils slowly drained. Archeological investigations conducted during the creation of the dredge spoils pile indicated the presence of archeological resources relating to American Indians. While some of these resources probably were disturbed during the creation of the spoils pile area, others probably will remain under the added soil profile (estimated in 1998 to be 14–17 feet deep).

Outside these two projects, minor grading projects associated with site development, plowing related to agricultural use, and looting of archeological resources probably affected the soils to varying degrees. Grading and plowing likely had minimal effect to the soil profiles containing prehistoric deposits. There is no evidence of substantial grading related to 20th-century site development. River valleys and floodplains are generally flat and therefore unlikely to require mass grading that would greatly affect soil profiles. Looting and restoration activities have had a negative effect on the soil profiles within the looted areas.

The physiographic and geologic features have evolved in the time since the end of the Civil War, but remain largely unchanged from the conditions found at the site at the end of the period of significance. The physiographic and geologic features of the property are contributing features to all significant periods of development at the site, Paleo-Indian, Archaic, Woodland, Mississippian, Contact, Settlement and Removal, and the Civil War.

High potential for future archeological discovery makes the soils at Moccasin Bend a contributing feature throughout all periods of significance.

Topography and Hydrology

Topographic and hydrologic characteristics of Moccasin Bend also made the area very attractive for prehistoric, historic, and contemporary settlement and use. The wide stream channel and bend in the river provide an easily defended site for habitation with a constant supply of water. Stringers Ridge and an elevated river valley provide upland areas for habitation during flooding conditions. These characteristics reflect the general topographic and hydrologic conditions throughout the developmental periods of Moccasin Bend.

The general topographic and hydrologic characteristics of the site remain similar to their condition at the end of the Civil War, though each has changed somewhat. The shoreline at Moccasin Bend is dynamic and continues to evolve. Most of this change directly relates to the flow of the river, but construction projects have also played a role.

During the Paleo-Indian period, the “heel” of the moccasin was a seasonal island separate from the rest of the peninsula. This “heel” is also the location of the known American Indian villages at Moccasin Bend. Evidence of this past condition is evident in a low and seasonally wet slough, which separates these areas today.

Manipulation of topography during the Woodland period is evident today. The mounds complex on the hospital property stands as a testament to the role of humans in shaping topography at Moccasin Bend.

Construction of Interstate 24 on the opposite side of the Tennessee River affected the study area with dredging and spoils dumping. Other earth moving projects include a channel-

widening project to overcome a narrowed river channel on the southern end of the Bend. This project removed 125–250 feet of shoreline width, more than a 500-foot-long area. The project affected the “heel” and “instep” of the moccasin, reshaping the riverbank, relocating tons of soil, and influencing American Indian sites (figure 4.1). Workers relocated material removed during the channel-widening project to the dredge spoils pile in the center of the property. This caused changes in both topography and hydrology. The addition of a range of 14–17 feet of fill substantially raised this section of the property. Eroded drainage channels and low, poorly drained areas resulted from settling of the spoils pile.

A recent construction project by the U.S. Army Corps of Engineers focused on stabilizing a half-mile long section of riverbank north of the “heel.” Tons of riprap and soil were added in an attempt to stop riverbank erosion and with it loss of archeological resources.

TVA management of the river has created a much less active floodplain within the study area. Construction of dams above and below Moccasin Bend contributes to higher river levels during dry periods and lower water levels in wet seasons. Distinct terraces are visible in the floodplain found along the western section of the project area. These terraces are visible where vegetation is mown on a regular basis (e.g., at the hospital and golf course). The terraces provide visual evidence of an evolving floodplain throughout the various periods of development.

Other 20th-century alterations to the Bend’s topography include the addition of nearly 20 feet of fill at the Interpretive Center tract and construction of the golf course, hospital, wastewater treatment facility, firearms training range, racetrack, and Hamm Road through Stringers Ridge.

Despite changes to the Bend’s topography and hydrology in the 20th-century, topographic and hydrologic character and features are



Figure 4.1: Chattanooga Free Times article photo showing dredging operation at Moccasin Bend, 1964, (CHBL Clipping File)

contributing resources to the periods of significance at Moccasin Bend. While the changes are many, they do not negate the contribution of these characteristics to all periods of significance.

Vegetation

Although vegetation probably changed dramatically throughout the prehistoric periods, data from this period are not available. Presumably, construction of houses, defenses, and demand for agricultural fields (by the Woodland period) led some prehistoric inhabitants to clear large areas of the Bend.

Civil War photographs taken from Lookout Mountain provide the earliest photographic documentation of the Bend. These images show tree canopy covering Stringers Ridge, several small pockets of vegetation on the western portion of peninsula, which appear to correlate with low areas, and open fields covering the majority of the Bend (figure 2.17). Other photographs taken from Lookout Mountain indicate this condition largely continues into the middle-20th century with additional trees occurring along fencerows by the 1950s (figure 4.2 and figure 4.3).

Today wooded areas cover much of Moccasin Bend. Stringers Ridge remains covered by mature hardwood forest consistent with the



Figure 4.2: Aerial view of Moccasin Bend and the Tennessee River, ca. 1949, (CHBL Collection, #00005681)

Civil War period. Because of succession in these areas over the last 60 years, tree canopy primarily covered the floodplain and river valley. Floodplain tree species canopy low areas, particularly those associated with the slough at the “heel” of the moccasin and the dredge spoils pile. Typically, a layer of wetland vegetation grows beneath the canopy. Crews from various agencies mow to maintain grass and lawn areas in the utility corridors and developments, such as the hospital, golf course, and wastewater treatment facility.

Vegetation at Moccasin Bend reflects a continuous history of human alteration since prehistoric times. Documentation of vegetative conditions at the Bend during the prehistoric period is not available, but archeologists can infer their make-up by recovered remains. During the historic period, the best documentation comes from Civil War-era photographs. These photos indicate that the hardwood canopy along Stringers Ridge is a contributing feature of the Civil War period. Areas currently maintained as non-forested or open are also consistent with Civil War-era conditions. While these areas were open

during the Civil War, many more adjacent acres of open space existed. Today’s landscape contains more forested than in 1865.

CULTURAL FEATURES

Land Use

Some of the land uses associated with the prehistoric period at Moccasin Bend includes hunting and gathering, residential, ceremonial, and agricultural. During the period of significance, inhabitants primarily used the property for agriculture, with some residential use, and a short period of use related to the Civil War. Current Moccasin Bend has varied land use, including government facilities and residential, recreational, and industrial developments.

NPS staff management/protection and the interpretive presence associated with NPS ownership are part of the contemporary land use of the Moccasin Bend National Archeological District. Contemporary land

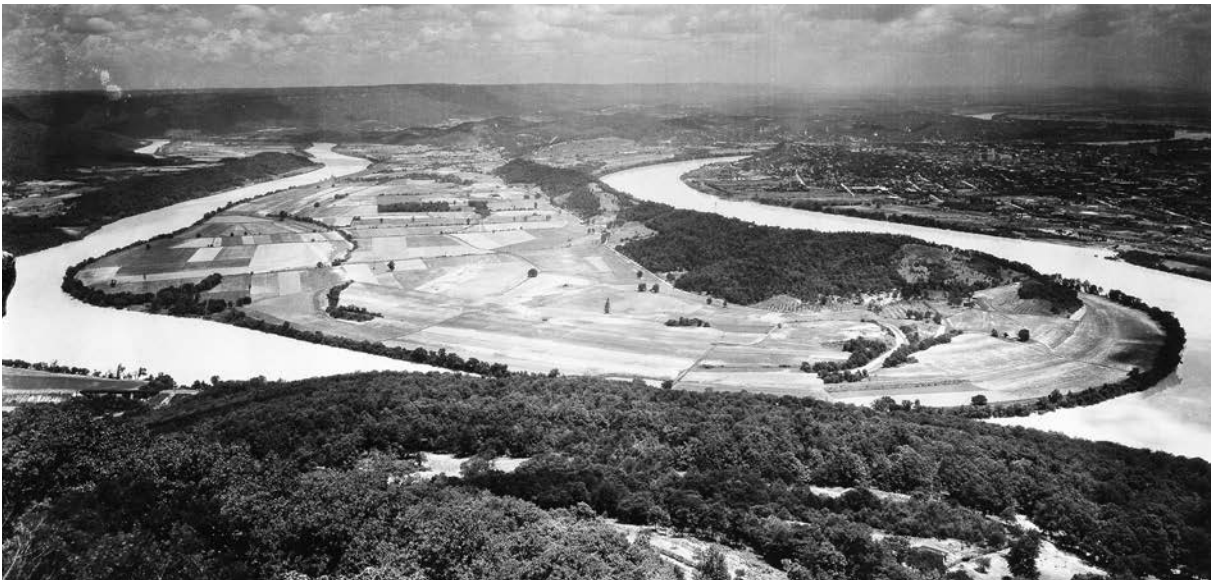


Figure 4.3: View of Moccasin Bend from Lookout Mountain, ca. 1940, (CHBL Collection #00005685)

uses are inconsistent with those during period of significance, and therefore are not a contributing landscape characteristic.

Circulation

Prehistoric circulation patterns would have been composed of footpaths and trails. Early circulation likely followed the route prescribed by existing physiographic features north of the national historic landmark on Moccasin Bend. The saddle formation near the current intersection of Manufacturers Road and Moccasin Bend Road likely connected to a crossing point at the Tennessee River where river travel would have also been possible. Circulation at Moccasin Bend has evolved from circulation patterns that were present at the time of the Civil War. Contemporary roads serve to connect to 20th-century developments on the Bend.

Federal Road/Trail of Tears. Existing portions of the federal road are contributing resources to the American Indian Forced Removal period. The section of the federal road west of Moccasin Bend Road could be located with archeological investigation. The condition is poor due to encroaching vegetation.

Civil War-era Roads. Civil War-era maps indicate a road running along the western base of Stringers Ridge in a north-south orientation. In the Civil War era, this road ran from the northern boundary of the study area south then veered southeast just before the current entrance to the hospital. From this location, the road climbed to Fort Whitaker with spurs connecting to the river and the other fortifications on Stringers Ridge. Sections of these roads remain in the landscape and now provide access to the earthworks on Stringers Ridge.

Historic maps indicate two primary connections between Chattanooga and Moccasin Bend via two natural gaps in Stringers Ridge. One pass over the ridge occurs just north of the study area. Sections of this road now make up portions of Manufacturers Road. This Civil War-era road is the federal road that continued across the intersection with the current Moccasin Bend Road to connect with Brown's Ferry. This is the route used to remove the Cherokee from the region in 1838. The road is no longer open or visible in the landscape west of Moccasin Bend Road (figure 4.4).



Figure 4.4: The approach to Brown's Ferry, ca. 1897, (Belkap, 202)

The second pass over Stringers Ridge aligns with the current access to the firearms training range. This pass connected to what is Moccasin Bend Road on the western side of the ridge and a road following the riverbank from the Interpretive Center tract south to the firearms training range. The road along the riverbank is no longer apparent. All remaining sections of the Civil War-era roads are contributing resources to the Civil War period of significance.

Contemporary Roads. Roads providing access to the WDEF radio towers, Blue Blazes Trail, and the private residence along Moccasin Bend Road do not appear on Civil War Era maps. Interior circulation at the hospital, golf course, and wastewater treatment facility are concurrent with the construction of these mid-20th century developments. These contemporary roads are not contributing resources to the period of significance.

Trails. The Blue Blazes Trail is currently the only formalized trail system at Moccasin Bend. This is a contemporary trail and therefore is not a contributing resource.

Views and Vistas

Stringers Ridge Views. Fortifications on Stringers Ridge were valuable for their direct lines of fire to Lookout Mountain and the cover provided by tree canopy (see figure 4.5.) From these positions, soldiers could protect the Union troops located in the city and prevent Confederate Forces from shelling the city from their positions on Lookout Mountain. Stringers Ridge remains canopied, but there are no longer views or vistas toward Lookout Mountain and only one view toward the city. These trajectories do contribute to the period of significance. The condition of the views is fair.

View from Moccasin Bend Valley to Lookout Mountain. Presumably the view from the prehistoric sites along the riverbank across the river and beyond to Lookout Mountain and Raccoon Mountain would have been very important for security. There are currently no views from these sites to the river or beyond due to vegetation growing between the cleared portions of the site and the top of the riverbank. The condition of these views is poor.

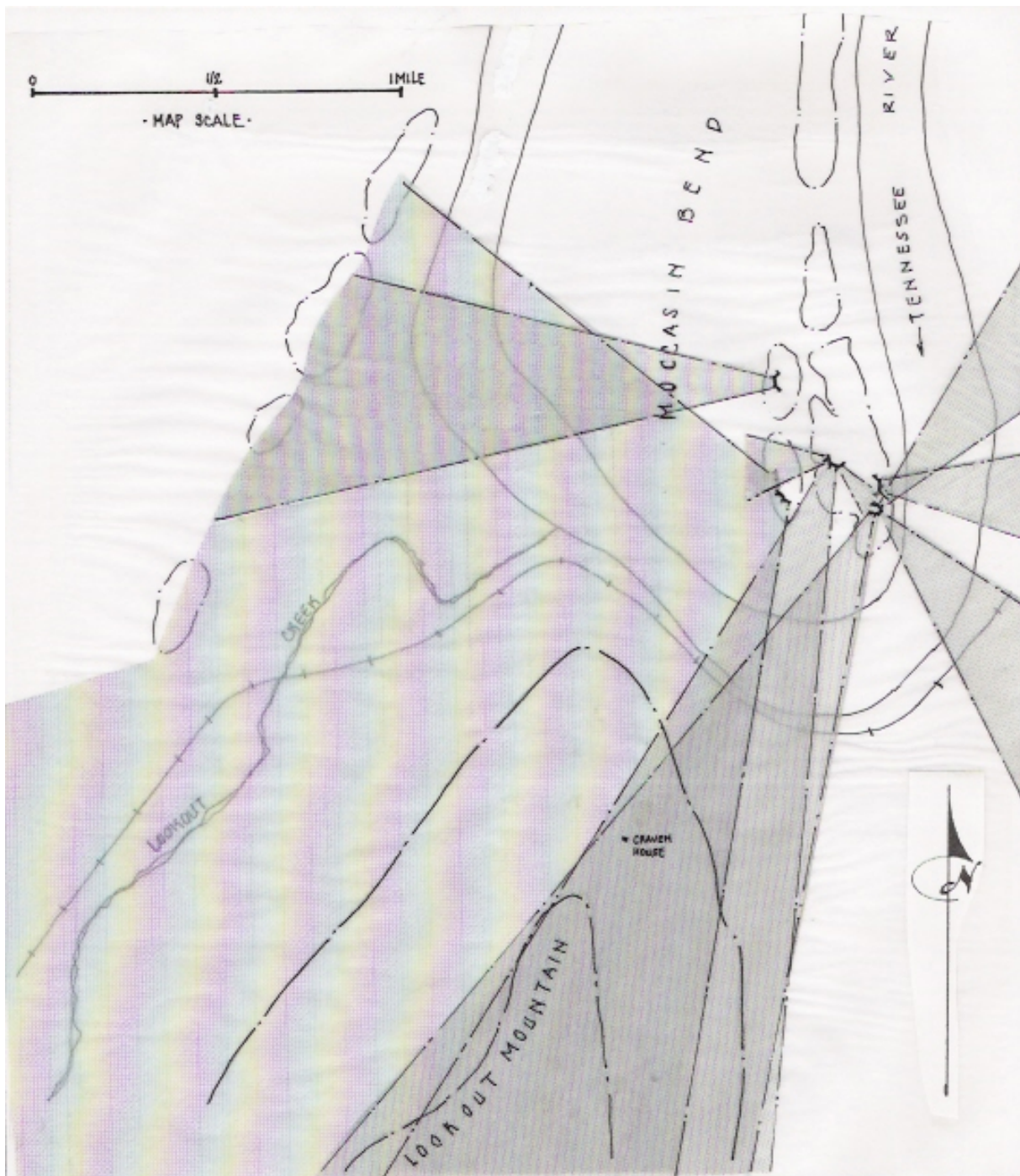


Figure 4.5: Artillery fields of fire at Moccasin Bend, 1998, (White Star Consulting).

View across the Tennessee River at Brown's Ferry Crossing. An NPS-managed clearing on the Old Federal Road tract just north of the crossing approximates the view across the river at the former location of Brown's Ferry. The crossing occurs on the property of the wastewater treatment plant on the eastern bank and private property on the western

bank making the site inaccessible to visitors. From the managed clearing, it appears that the view west is mostly intact with only a few modern additions to the western bank. Visible development and storage on the property affects the view from the western bank toward the wastewater treatment facility. This view

is a contributing resource at Moccasin Bend. While the current condition of the view is poor, restoration is possible.

View from Lookout Mountain to Moccasin Bend. The once bucolic early 20th-century view from Lookout Mountain to Moccasin Bend inspired many in the Chattanooga community to seek protection for the scenic qualities of Moccasin Bend. This view was very important not only in the preservation of the Bend, but also during the Civil War as a position of the Confederate Army valuable for both shelling Federal troops in the city and protecting supply lines into Chattanooga. Currently, one can obtain the best view from Point Park on the northern tip of Lookout Mountain. While contemporary land uses now characterize a portion of the Bend and open fields have been lost, this important Civil War view continues to draw thousands of visitors each year. While the vantage point is located outside of the study area, this view should be a contributing resource of the Civil War period.

COMPONENT LANDSCAPES

Archeological Sites

Hampton Place. Archeologists regard the Hampton Place site as a premier archeological site. Despite considerable looting in the 1970s and 1980s that resulted in the destruction of 700 burials, archeologists consider the site to have great potential to yield additional archeological information related to the Late Archaic through Late Mississippian periods and the American Indian and European contact period. Research to date indicates the presence of a single palisade enclosing two Late Mississippian villages each with developed plazas, public buildings, residences, and burials. A large presence of Spanish artifacts suggests this village was on a major trade route during the European contact period indicating high potential that Spanish explorers visited the villages. All contributing resources at the site are subterranean. Existing aboveground vegetation, circulation,

structures, and small-scale features are not contributing resources. A petroleum utility corridor passes between the two villages. It is unknown if construction of the pipeline affected the site.

Mallards Dozen Site. The Mallards Dozen site is located along the riverbank north of the Hampton Place site. The western section of the Blue Blazes Trail provides access to the site. Archeological investigation suggests the site dates to the Early Archaic period with Middle Archaic and Early through Late Woodland deposits stacked over the earliest components. The site remains poorly documented, but archeological scholars believe it possesses great potential for future discoveries. Contributing resources at the site are located up to eight feet below the current soil surface. Existing circulation and vegetation at the site are not contributing resources. The Army Corps of Engineers' recent riverbank stabilization efforts occurred along the western boundary of this site. Riverbank erosion has long been a threat to the site. The recent stabilization project is already showing signs of failure where the new structure meets the bank. Access to the site via the Blue Blazes Trail also makes the site vulnerable to looters.

Vulcan Site. The Vulcan site is located along the riverbank north of the Mallards Dozen site. Investigations at the site identified Late Archaic period through Early and Middle Woodland deposits. Investigations revealed a house floor that dates to 1335 BC, making this the site of one of the earliest documented dwellings in the southeast. Evidence suggests that the site extends north into the golf course property. The Blue Blazes Trail crosses through the site and runs along its western boundary. No evidence of the Vulcan Site is visible in the landscape. Existing circulation, vegetation, views, and structures are not contributing resources of the site. A large metal forced utility main sign may remain partially imbedded into the site. The effects of the sign on the site are unknown. Access to the site via the Blue Blazes Trail makes the Vulcan Site vulnerable to looters.

Woodland Mound Complex. The Woodland Mound complex is located in the southeastern portion of the Moccasin Bend Mental Health Institute campus. The complex may contain up to eight burial mounds.⁶ Investigation and delineation of the mound complex to date is limited, but investigations in 1915 provide evidence that the features date to the Late Woodland period. A previous investigation revealed that one mound contained Civil War-era coffins. One of the mounds is no longer visible and its destruction probably occurred during the 1960s. Security concerns prevented the project team from accessing these features. However, one mound is visible from an adjacent NPS-owned property. An observer can view the mound, covered by mown lawn, from an approximate 100-yard distance. Archeologists believe the mound complex possesses high potential in providing additional archeological information related to the Late Woodland period and Civil War-era burials at the site. Unless proven otherwise, all mounds within the complex are contributing resources to the Woodland period and the Civil War periods.

Brown's Homestead and Ferry Sites

John Brown's Homestead, the eastern portion of Brown's Ferry crossing, and a portion of the federal road are located on the western portion of the Moccasin Bend Wastewater Treatment Facility property. This site played an important role in the Cherokee removal from the Tennessee Valley along the federal road system (now known as the Trail of Tears). Moccasin Bend contains a portion of the trail used to lead the Cherokee from Chattanooga west on the journey to Oklahoma. The site of the ferry crossing is also important for events during the Civil War. In 1863, Union troops took control of the crossing and thereby opened the supply route between Nashville and the troops stationed in the city of Chattanooga.

6. See "Chapter 3: Existing Conditions" for a discussion on the number of Woodland Era mounds in the Moccasin Bend National Archeological District National Historic Landmark.

The site is visible from adjacent NPS-owned property and is an open mown field. The homestead site is not obvious; it probably was built on a high point of the property, several hundred yards from the riverbank. The ferry crossing is evident on both the eastern and western riverbanks where the landform slopes down to water on both banks. The banks of both sides of the river are relatively clear of vegetation and do not appear to have been manipulated. Views across are open. The federal road is not visible in the landscape today, but it would have connected to the crossing during the period of significance. Archeological investigation could be conducted to locate the road alignment and to pinpoint the homestead site. These resources are considered contributing resource to the Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal period and the Civil War period. The current condition of this site is fair due to missing features, such as the federal road.

Civil War Sites along Stringers Ridge

Well-preserved Civil War resources related to the Battle of Chattanooga are found along the southern portions of Stringers Ridge. Contributing resources include the following: a road system; hardwood trees from the time of the battle and progeny of the Civil War-era material; a view toward the City of Chattanooga from the top of the southernmost and easternmost knoll; the 10th Indiana Artillery Battery Positions (including multiple gun positions, embrasures, artillery lunettes, and a collapsed powder magazine); Whitaker's Brigade Camps (including three camps containing remnant hut pads); the 18th Ohio Artillery Battery Positions (including gun batteries, embrasures, and hut pads); and the Infantry Regimental Camp and Unfinished Artillery Parapet (including a rifle pit and an unfinished artillery parapet). These resources are primarily in good condition, but are at risk of degradation from erosion and tree throw

if proper maintenance and monitoring are not performed regularly. All are contributing resources to the Civil War period. Views from Stringers Ridge to Lookout Mountain are important landscape features that no longer exist.

OTHER MOCCASIN BEND PROPERTIES

This section is primarily composed of portions of the study area that are currently inaccessible due to security concerns and/or properties that are unlikely to contain contributing landscape resources.⁷ The following resources contain potential for historic resources or are related to contributing resources described previously in this document: Moccasin Bend Mental Health Institute, Blue Blazes Trail, Moccasin Bend Golf Course, Moccasin Bend Wastewater Treatment Facility, Old Federal Road tract.

Moccasin Bend Mental Health Institute

The Moccasin Bend Mental Health Institute is currently inaccessible to the project team due to security concerns. This campus contains the Woodland Mound complex. These contributing resources probably will yield additional archeological information about Moccasin Bend and they represent the only visible prehistoric features on the Bend. Additionally, portions of the campus may be found eligible for listing in the National Register of Historic Places because they are more than 50 years of age, associated with an important regional architect, retain integrity and may represent an important building type. An eligibility determination has not been made for the buildings at the hospital. The hospital property is intended to become part of the Moccasin Bend National Archeological District and must be evaluated for NR eligibility prior to any demolition activities.

7. Potential for buried archeological resources is possible for landscapes listed as Other Moccasin Bend Properties.

Much of the Moccasin Bend Mental Health Institute campus is more than 50 years old, was built by a regionally important modernist architect, appears to retain a great deal of integrity, and may represent a noteworthy building type for the region.

Blue Blazes Trail

The Blue Blazes Trail is not a contributing resource, but it does occupy portions of the Vulcan site and provide access to the Mallards Dozen site. Evaluation of the trail's impact on contributing archeological resources must be considered as future site management is considered.

Moccasin Bend Golf Course

While the Moccasin Bend Golf Course is not in itself a contributing resource, it does contain the northern portion of the Vulcan site. Management of the golf course must be sensitive to archeological resources that are located on a small portion of the site.

Portions of the Moccasin Bend Wastewater Treatment Facility contain the eastern portion of Brown's Ferry, a section of the federal road, and the presumed site of John Brown's Home. Future management of the site should be sensitive to these historic resources.

Old Federal Road Tract

A portion of the federal road crosses the Old Federal Road tract. Archeological investigation is needed to identify the roadbed, but has not been conducted to date. This feature promises great interpretive potential.

Other Properties

The following other Moccasin Bend properties were found to contain no visible historic resources related to the period of

significance: former model airplane facility, private residence along Moccasin Bend Road, Law Enforcement Firearms Training Range, WDEF radio towers, and the Interpretive Center tract.

ETHNOGRAPHIC RESOURCES

No ethnographic studies for Moccasin Bend have occurred to date. Researches probably will define resources based on relationships with known village sites and the Trail of Tears. During the site selection process for a new interpretive center at the Bend, however, consultations with tribal representatives were conducted. These sessions indicated profound connections between contemporary American Indian tribes and the prehistoric archeological sites found at the Bend. NPS policy states a commitment to the protection of archeological sites and ethnographic resources. NPS staff and consultants shall not disclose the locations of these resources if a threat to the resource or tribal privacy is probable. A history of looting sites and expressed concern from consulting tribes indicate a potential need for limiting access to the Moccasin Bend sites.

EVALUATION OF LANDSCAPE INTEGRITY

Landscape integrity refers to a cultural landscape's ability to convey its historic significance. *National Register of Historic Places Bulletin 15* defines historic integrity as "the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's prehistoric or historic period." *National Register Bulletin 15* defines seven aspects of integrity to use when evaluating a historic property:

- Location is the place where the historic property was constructed or the place where the historic event occurred;
- Setting is the physical environment within and surrounding a property;
- Design is the combination of elements that create the form, plan, space, structure, and style of a property;
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time; and
- Association is the direct link between an important historic event or person and a historic property.

In order to retain historic integrity, a property must possess several, and usually most, of these seven aspects. Evaluating historic integrity involves first determining the historic significance of a property and then identifying the existing features that contribute to our ability to recognize and understand this significance. Character-defining features are those distinctive features or qualities that make a property unique. They are the individual parts that make the whole place special and worthy of our recognition as a historic property.

Location

The cultural landscape at Moccasin Bend has excellent integrity of location throughout the period of significance due to its continual use for nearly 12,000 years. Archeological sites are preserved at Moccasin Bend for their rarity and potential ability to reveal the cultural practices of American Indians in the Tennessee Valley. Promise for great future yields of information about these cultures is almost guaranteed. Although limited to date, the archeological investigations signify in situ remains for future discovery. Civil War period resources also retain excellent integrity of location. Original locations and well-

preserved condition create ideal conditions for interpretation of the battles that created these features.

Design

The landscape at Moccasin Bend retains a high level of design integrity throughout the period of significance. Prehistoric and historic resources convey the spatial layouts, organization, scale, and materials that defined them during their respective periods of development and use. Civil War resources are quite visible and readily describe their intended functions in the Battle of Chattanooga. While still buried, archeological study of known village sites and burial mounds point to a great deal of retained design related to town planning, scale, original materials, and organization mostly contained within the original stratigraphy. The Brown's Homestead and Ferry site remains legible in the landscape today despite a loss of structures.

Setting

The setting at Moccasin Bend retains moderate integrity as it has changed markedly since the period of significance. Current conditions include the addition of an interstate highway, crisscrossing utility corridors, a loss of views associated with the Battle of Chattanooga, and land uses related to wastewater treatment, golfing, firearms training, and mental health services have added many new buildings, structures, circulation routes, and landscape features to the Bend. Despite the degraded setting found at much of the property, the setting on Stringers Ridge shows great promise for viewshed restoration. Archeological deposits are well preserved and are not affected by the setting in their ability to contribute to understanding of prehistoric lifeways.

Materials

Materials defining the cultural landscape at Moccasin Bend retain a high level of integrity within the Prehistoric periods and the Civil War period. The Brown's Ferry and Homestead and Trail of Tears site retain no evident circulation, structures, or buildings and therefore the American Indian Forced Removal period has diminished material integrity. Archeological resources are deemed very complete and minimally disturbed by previous archeological investigations and looting. Evidence of burned buildings and abundant Spanish goods at the Hampton Place site indicate great potential for material goods left in situ throughout the village. The Stringers Ridge Civil War earthworks retain a great deal of their original material as well as the surrounding hardwood vegetation.

Workmanship

Integrity of workmanship related to the prehistoric period is currently unknown. Future archeological survey of these areas is anticipated to yield examples of prehistoric workmanship. Workmanship related to Civil War landscape resources can be seen in the existing fortifications. This period of significance also exhibits landscape resources possessing a high level of integrity. The lack of evidence of these features in the present landscape diminishes the workmanship associated with Brown's Ferry and Homestead and the Trail of Tears. Integrity of workmanship is unknown for the Prehistoric period and the Civil War period, but low during the Cherokee Settlement and Removal period.

Feeling

Moccasin Bend possesses diminished integrity related to feeling throughout the periods of development. A greatly altered setting with many contemporary intrusions creates a landscape that is currently hard to place in a prehistoric or historic period. Utility corridors, loss of historic views, road noise, riprapped riverbanks, and buildings visible within and outside of the property all work to undermine the prehistoric or historic feeling of the site.

Association

The sites integrity of association related to American Indian history is high. Tribal interest in the site has been expressed through tribal consultations for the new interpretative center. This involvement is anticipated to continue and grow as future management decisions are made and ethnographic resources are defined. The landscapes association with the events of the Trail of Tears and John Brown are certain and could be enhanced with management and treatment of the resources associated with Cherokee removal. Association with the events of the Civil War is good. Though the earthworks on Stringers Ridge have been seen by few, the role of these fortifications is undeniably important to the Union victory in Chattanooga. Well-preserved resources convey this association. Restoration of views that contribute to the periods of significance potentially could strengthen the associations.

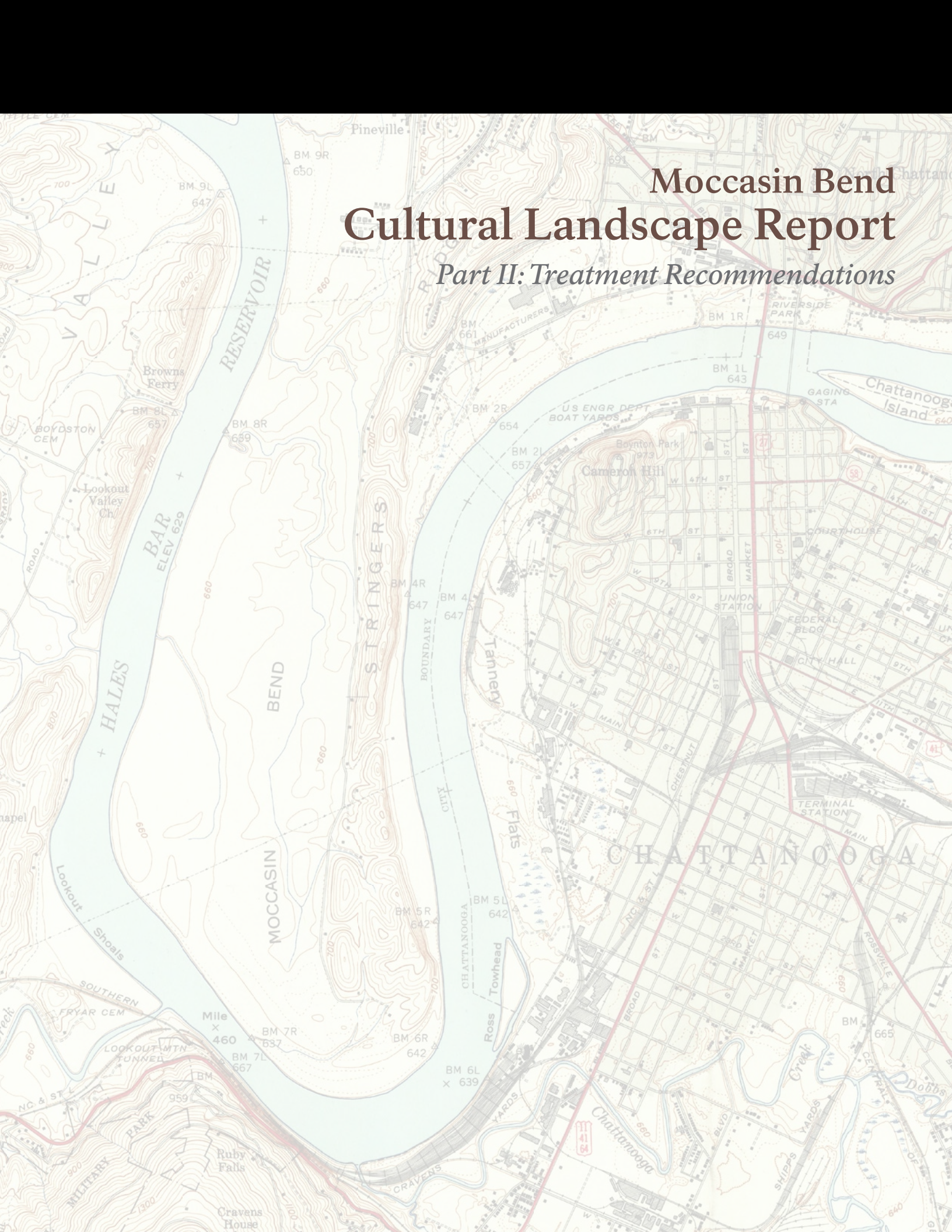
INTEGRITY OF THE WHOLE

As a whole, the study area retains integrity given a long period of significance and occupation. A high level of integrity was found related to location, design, and association during all periods of significance. High levels of integrity were also assigned to materials and workmanship during the Prehistoric and Civil War periods. The setting retains a moderate degree of integrity primarily due to many contemporary intrusions into the cultural landscape. The American Indian Forced Removal period has a diminished level of material integrity as no material evidence left from the road, ferry or homestead remains. All periods were determined to have diminished integrity of feeling due to the many contemporary intrusions that prevent the site from conveying prehistoric or historic period character.

A detailed topographic map of Chattanooga, Tennessee, centered on the Moccasin Bend area. The map features contour lines indicating elevation, with major contours at 600, 700, and 800 feet. The Moccasin River is shown flowing through the center, with the Moccasin Bend area highlighted. Key landmarks include the Lookout Valley, Browns Ferry, and the city of Chattanooga. The city grid is visible, with major streets like Broad, Market, and Main. The title "Moccasin Bend Cultural Landscape Report" is prominently displayed in the upper right, with "Part II: Treatment Recommendations" below it. The map also shows various points of interest such as the US Engr Dept Boat Yards, Cameron Hill, and the Chattanooga Terminal Station.

Moccasin Bend Cultural Landscape Report

Part II: Treatment Recommendations



About the *Part II* divider: United States Geological Survey of Chattanooga, Tennessee. Compiled by the U.S. Geological Survey in 1941.

Located online in the U.S. Topo and Historical Topographic Map Collection: <http://geonames.usgs.gov/pls/topomaps/>

TREATMENT RECOMMENDATIONS

INTRODUCTION

The study area for this cultural landscape report includes all of the Moccasin Bend Archeological District National Historic Landmark plus adjacent properties including the Moccasin Bend Wastewater Treatment Facility, the Interpretive Center tract, and the Old Federal Road tract. While the federal government (National Park Service) owns much of the property within the study area, entities other than the National Park Service own a portion of the acreage. When Moccasin Bend National Archeological District became a unit of Chickamauga and Chattanooga National Military Park, the general mission of the park unit was to “preserve, protect, and interpret for the benefit of the public the nationally significant archeological and historic resources located on the peninsula known as Moccasin Bend, Tennessee.”¹

The following treatment recommendations provide a management vision for the Park unit’s cultural landscape that provide for long-term preservation and interpretation of historic resources. The recommendations synthesize the work of the CLR project team and address the issues outlined for the CLR project team during meetings with current NPS administration.

Significance statements for this park unit describe what sets the national historic landmark apart on a regional and national level. Prior environmental documents describe the significance of the park unit as the following:

- The Moccasin Bend National Archeological District possesses national and international importance based on approximately 12,000 years of continuous American Indian

1. H.R. 216 (108th): Moccasin Bend National Archeological District Act, 108th Congress, 2003–2004. Text as of January 7, 2003 (Introduced).

occupation. The archeological information and research potential of the district’s excavated and unexcavated archeological resources are not duplicated within the national park system. These resources span periods of American Indian occupation from transitional Paleo-Archaic, Archaic, Woodland, Mississippian, European contact, and Cherokee removal.

- Moccasin Bend represents the best preserved, most important, and most concentrated archeological assemblage of Southeastern American Indian cultures known to exist in the Tennessee Valley.
- The Trail of Tears (the route followed during the tragic event of 1838 when the U.S. Government forcibly removed Cherokee Indians from their homelands) passes through portions of Moccasin Bend.
- Moccasin Bend retains profound spiritual importance for many contemporary American Indian tribes with ancestral ties to the area.
- Civil War earthworks on Stringers Ridge from the Battles for Chattanooga (1863) are the best-preserved constructed remnants of the battles. These Union Army gun emplacements and related features represent the only surviving physical elements associated with the campaign.²

TREATMENT PHILOSOPHY

As is common with complex dynamic systems, such as cultural landscapes, the character of the landscape has changed over time, as vegetation matures and declines, with the addition of new buildings, when structures and features deteriorate, and because land-use patterns within the study area have evolved. The goal of the treatment recommendations

2. National Park Service, 2009, 10-11.

in this report is to preserve and protect existing features that contribute to the historic character of the Moccasin Bend National Archeological District cultural landscape and to provide for protection of the archeological resources within the study area boundary. In particular, the archeological resources need additional investigation as outlined in the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” by Alexander. Existing aboveground features that contribute to the periods of significance are to be preserved.

Despite several excavations completed within the national historic landmark, the archeological information does not provide enough evidence to accurately reconstruct or restore the prehistoric landscape.

The Secretary of the Interior recognizes four primary treatment alternatives for historic landscapes: preservation, rehabilitation, restoration, and reconstruction. *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* outline these treatment alternatives. The National Park Service’s *Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*, succinctly defines these treatment alternatives as follows:

Preservation is the act of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of materials and features rather than extensive replacement and new construction. New additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code required work to make properties functional is appropriate within a preservation project.

Rehabilitation is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical or cultural values.

Restoration is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific time and in its historic location.³

PRIMARY TREATMENT

Based on research, inventory, and analysis the treatment strategy for the rich archeological resources from the periods of significance (10,500 BC–AD 1865) is preservation.

ARCHEOLOGY

The archeological features within the study area contribute to the significance of the national historic landmark. According to the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” for the study area, “a systematic Phase I Archeological Survey of the entire parcel would be the most efficient means of understanding the extent of the archeological resources present on the Bend. A complete understanding of those resources is necessary so that these sites can be as fully protected as

3. Birnbaum, 18, 48, 90, 128.

possible.”⁴ Alexander further recommends geoarcheological ground truthing for the study area. “This involves testing the geomorphological postulates that support the predictive model of prehistoric settlement patterns on Moccasin Bend. This study is necessary to ensure that the research and sampling methodology developed for the Phase I Archeological Survey will employ the most efficient means possible to determine the extent of the archeological sites within Moccasin Bend National Historic Landmark. This should also include the collection of core samples from a number of locations on Moccasin Bend.”⁵ Additional archeological recommendations include mapping of historic and prehistoric earthworks, amending the state archeological files, and radiocarbon dating of previously collected samples.⁶ Alexander also recommends the establishment of a new grid system that would use the U.S. State Plane system, Tennessee zone, NAD 83 datum. Managers should use this system in any future descriptions of archeological sites within the Moccasin Bend National Historic Landmark.⁷

In accordance with Section 106 of the National Historic Preservation Act, archeological survey is a mandatory component for all federal construction projects and land planning efforts occurring on federal lands. Section 106 compliance is also necessary where federal agencies provide funding or issue licenses, permits, or approvals on non-federal lands. All construction and planning projects undertaken at Moccasin Bend will require Section 106 compliance.

TRIBAL CONSULTATION

“Agencies are required to consult throughout the planning process of an undertaking, beginning with identification and evaluation of property of religious and cultural significance

4. Alexander, 165.

5. *Ibid.*, 168.

6. *Ibid.*, 170-174.

7. *Ibid.*, 169.

to the Tribe.”⁸ The law requires compliance with several acts including the National Historic Preservation Act, the National Environmental Policy Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. These acts require discussion with tribes in all ground-disturbing projects within tribal areas when any Indian tribe “attaches religious or cultural significance to the historic property.”⁹

Tribal consultation was not a requirement of this cultural landscape report; however, recommendations in this report respond to concerns raised during tribal consultation during the Development Concept Plan/ Environmental Assessment process. During the tribal consultations held for that plan, “several tribal representatives expressed concern that Moccasin Bend (and particularly the village locations with associated human burials) be treated with respect as sacred ground. The extensive past disturbance and looting of the burial sites have heightened sensitivities regarding the treatment and protection of these areas. Input received from ongoing consultation with affiliated tribal members and others concerning visitor use issues will be factored into the NPS decision-making process.”¹⁰

GENERAL TREATMENT RECOMMENDATIONS

Critical to the success of any future archeological endeavors within the study area is the formation of a cooperative management committee. Because land uses and ownership within the study area are diverse, protection and monitoring of archeological resources is difficult. This committee should include representatives from “NPS, the Moccasin Bend Mental Health Institute, the City of Chattanooga, the

8. Hutt, 11.

9. ADD WEB REF

10. National Park Service, 2009, 52.

Hamilton County government, and WDEF, as well as a professional archaeologist familiar with Moccasin Bend.”¹¹ The purpose of this committee is “to protect and preserve resources that straddle the boundaries of the National Park. . . The first priority of this group should be to develop a memorandum of agreement to include the golf course, WDEF, and the Mental Health Institute grounds as part of a geomorphological ground truthing and Phase I archeological survey.”¹²

“After agreeing upon and completing the immediate recommendations, the Cooperative Management Committee could begin work on an official agreement for management and protection of the resources that straddle the boundaries of the National Park and the mental health facility or the golf course.

This Cooperative Management Agreement should:

- (1) allow for the access of studies of the entire Fort Whitaker military complex;
- (2) allow for the study of the Woodland Mound complex;
- (3) allow for the study of the flood plain around the mental health facility;
- (4) prohibit any earthmoving activities below the 660 line on the western side of the golf course; and
- (5) evaluate the current right-of-way (ROW) status for power lines and pipelines across the Bend.”¹³

The agreement might also include a conservation easement for those properties that remain as private holdings. A conservation easement would restrict any future development and use of the properties within the study area.

11. *Ibid.*, 174.

12. *Ibid.*, 165.

13. *Ibid.*, 174.

All interpretive activities within the Moccasin Bend National Historic Landmark should originate at the future Moccasin Bend Interpretive Center.¹⁴ Interpretation should follow guidelines outlined in the “Moccasin Bend National Archeological District Long-Range Interpretive Plan” completed in June 2011.

This cultural landscape report recommends an ethnographic overview and assessment report for the national historic landmark. Critical components of this report are the Trail of Tears, the connection of this event to the national historic landmark, and the physiographic features of the site and their influence over settlement patterns within the national historic landmark.

Natural Systems and Features

Physiography, Geology, and Soils. The existing physiography, geology, and soils on the site require preservation. Any areas of erosion need stabilization (see specific guidelines for shoreline stabilization and earthwork stabilization).

Shoreline stabilization—Alexander recommends that landscape managers conduct this stabilization in a way most sensitive to the archeological resources. “The most desirable means of shoreline stabilization for Moccasin Bend is the one that requires the least amount of bank cutting in order to obtain the necessary slope for the stabilization to occur.”¹⁵ Shoreline erosion is critical in locations where archeological resources are located nearby. See illustration 5.1 for shoreline stabilization zones.

Early shoreline stabilization efforts made use of riprap to protect the riverbank. Subsequent flooding damaged the riprap-stabilized banks. In 2009 the U.S. Army Corps of Engineers (Nashville District), in cooperation with

14. See Lord Aeck Sargent, “Moccasin Bend Interpretive Center Schematic Design.”

15. *Ibid.*, 168.

the National Park Service, undertook a project to repair the stabilized slopes. This project incorporated the use of riprap and bioengineering methods, which involved the planting of native plant species.¹⁶

Topography and Hydrology. This cultural landscape report recommends that the topographic conditions within the study area remain as they are today. No blasting or dredge soils dumping should occur within the study area. Cut/fill operations should only occur with thorough archeological investigation or survey at any site. For example, any construction efforts involved with the proposed visitor center and its connecting circulation should occur only in areas where it has been verified that no known archeological resources exist. This verification process has been completed in the identified construction area. Additionally, all construction within the study area should be conducted with sensitive methods, such as post and beam. Areas where there are known archeological resources capped by fill, such as the dredge spoils pile, should not be regraded or disturbed by future construction efforts.

Vegetation. The existing vegetation within the study area reflects a combination of natural growth, nonnative plant encroachment, and planned planting and maintenance. Due to the diverse land uses within the study area, the vegetation at the site includes forested zones of varying ages, maintained lawns, and unmaintained understory areas choked with invasive nonnative species. The following are general and specific vegetation recommendations for the study area:

- Remove nonnative vegetation in key zones of the study area and maintain an open understory composed of a mix of native grasses and forbs. Remove nonnative vegetation in a sensitive manner, using manual labor as possible.
- Maintain lawn areas as open space. Do not allow additional woody

vegetation to grow up in lawn areas. As appropriate, transition lawn areas to maintained meadows to decrease need for maintenance.

- Remove historic specimen trees only when they pose a safety threat to visitors, are in advanced decline, or present a risk to historic resources.
- Develop and maintain site lines to desirable/historic views and vantage points (see below).

Cultural Features

Land Use. To facilitate proper management, oversight, and access of historic resources within the study area, this cultural landscape report recommends that the federal government acquire by donation or willing seller any non-NPS owned properties. This includes the acquisition of the following: Moccasin Bend Mental Health Institute, Law Enforcement Firearms Training Range, private residence in-holdings within the Moccasin Bend National Historic Landmark, WDEF radio towers, and the Moccasin Bend Golf Course. The report also recommends that the federal government obtain the northwest portion of the Moccasin Bend Wastewater Treatment Facility site, which contains the Brown's Ferry crossing location. Federal ownership will facilitate proper management and interpretation of this cultural resource.

Circulation. Existing vehicular circulation within the site should be preserved but limited. The 2002 Chattanooga Urban Area Bicycle Facilities Master Plan shows a greenway link on the eastern shore of Moccasin Bend extending to the southern border of the firearms training facility. This cultural landscape report recommends that any greenway trail should loop back on the eastern shore of Moccasin Bend to limit access to the Civil War sites along Stringers Ridge and the archeological sites on the western shoreline of the Bend. The greenway could potentially use the access road at the firearms training facility (pending decommission of this facility) to

16. CHCH Chief of Resource Management, Jim Szykowski, provided project details via Superintendent Cathleen Cook in January 2014.

loop bikers back to Moccasin Bend Road (see illustration 5.1). Access past this point south on Moccasin Bend Road should be limited to ranger-led groups.

Contemporary Roads—If the federal government gained ownership of the Moccasin Bend Mental Health Institute, they should gate Moccasin Bend Road south of the entrance to the Moccasin Bend Golf Course. Access could be limited to NPS staff and those accessing the Firearms Training facility and WDEF radio towers. All contemporary roads within the national historic landmark should be preserved and maintained for emergency and maintenance access inside the site.

Blue Blazes Trail—Maintain the trail and trailhead.

Views and Vistas.

Lookout Mountain to Moccasin Bend—This cultural landscape report recommends the preservation of the view to Moccasin Bend from Lookout Mountain. There are numerous interpretive opportunities associated with this view. From this vantage point and with interpretation, visitors can begin to understand how the river and the shape of the land provided protection and resources to the people who inhabited Moccasin Bend for thousands of years. Interpretation at this site could also include information about the importance of Moccasin Bend to Union forces during the Civil War.

COMPONENT LANDSCAPE RECOMMENDATIONS

Archeological Sites

NPS policy is to manage archeological resources “in situ, unless the removal of artifacts or physical disturbance is justified by research, consultation, preservation, protection, or interpretive requirements. Preservation treatments will include proactive measures that protect resources

from vandalism and looting, and will maintain or improve their condition by limiting damage due to natural and human agents.”¹⁷ The “Moccasin Bend National Archeological District: Archeological Overview and Assessment” outlines specific recommendations for the treatment of archeological resources within the Moccasin Bend National Historic Landmark. The overall recommendations include prevention of further erosion of resources within floodplains and along shorelines, prevention of further looting of archeological resources, and protection of mound resources in the Woodland Mound area. Additionally, archeological areas need to be verified using ground truthing measures and testing is needed to confirm the extents of major archeological sites. The “Moccasin Bend National Archeological District: Archeological Overview and Assessment” states “a systematic Phase I Archeological Survey of the entire parcel would be the most efficient means of understanding the extent of the archeological resources present on the Bend. A complete understanding of those resources is necessary so that these sites can be as fully protected as possible.”¹⁸

Currently, there is insufficient data to reconstruct the paleo-environment for Moccasin Bend. To chronicle changes in the natural environment over the span of potential human occupation (i.e., from the late Pleistocene to the present) at Moccasin Bend requires such a study. Components of a paleo-environmental study should include: 1) the development of model(s) of landform evolution for alluvial landforms at Moccasin Bend; and 2) the composition of, and changes in, floral communities within the study area. Two goals should be: 1) to provide a framework that will allow for placing human occupations into discrete environmental contexts; and 2) to outline potential site formation processes that will aid in the interpretation of archeological deposits.

17. National Park Service, 2006, 68.

18. Alexander, 165.

This study should draw from empirical data collected from Moccasin Bend and comparative data collected from elsewhere in the Tennessee River Valley. Data should come from multidisciplinary sources: archeology, climatology, geology, geomorphology (including sedimentology and pedology), and palynology.

Data from Moccasin Bend could include:

Archeological: Use data from previous and future investigations.

Climatological: Consider stable carbon and oxygen isotope analysis of soils, faunal remains, and/or floral specimens.

Geological and geomorphological (including sedimentology and pedology): Use whatever information is available, particularly results of previous deep testing efforts (e.g., Geoprobe testing by Goodwin and Assoc. in 2006). If additional subsurface investigations are an option, consider the following testing strategies: mechanical trenching, deep testing using trench boxes to minimize areal extent of disturbance, auger borings with manual equipment (e.g., bucket augers), and mechanical coring (e.g., Geoprobe or Giddings Core).

Paleoethnobotanical: Use ethnobotanical results from archeological investigations. Floral assemblages from archeological components will provide insight on the local plant communities during corresponding occupations.

Temporal: Use radiocarbon and optically stimulated luminescence (OSL) dates to establish ages of landforms, determine rates of alluvial sedimentation, and determine the ages of discrete depositional or erosional events.

Comparative data (preferably from Tennessee River Valley) could include:

Archeological: Use information from the Tennessee River Valley and tributaries of the Tennessee River (e.g., Hiwassee River and Lower Little Tennessee River).

Geological and geomorphological: Consider archeological studies with geomorphological components, geotechnical reports (e.g., from bridge construction, lock and dam studies, etc.), and well logs. Also, use topographic maps or digital elevation models to trace and correlate landforms, particularly terraces, along the course of the Tennessee River.

Paleoethnobotanical: Use ethnobotanical results from archeological investigations to infer changes in floral communities over time.

Palynological: Use palynological studies to infer changes in climate over time and effects of humans on floral communities.

Temporal: Use radiocarbon and OSL dates from sources within the region, where applicable, to determine the timing and/or rates of comparable events.

Consider emphasis on recovering information related to the late Pleistocene and early Holocene environment as this information in particular is lacking at Moccasin Bend. Future investigations may provide useful information for interpreting the appearance and composition of Moccasin Bend, but the NPS should not attempt to reconstruct a paleo-environment.

This report assumes that alluvial landforms within the study area were dynamic environments throughout the Pleistocene and early Holocene and these landforms became more stable as the climate and fluvial systems stabilized throughout the Holocene. The report also assumes that natural processes were dominant forces in shaping the landscape during the earliest intervals of occupation (late Pleistocene and early Holocene) and that the anthropogenic signature became progressively more pronounced through time. Additional

excavations at Moccasin Bend will have to be in line with NPS policy for the management of archeological resources.

Although these recommendations focus on alluvial landforms, localized depositional settings within the Stringers Ridge area of Moccasin Bend (e.g., colluvium along toe slopes and mixed colluvium and alluvium within the low-order drainages and hollows between knobs) may be good sources of paleoenvironmental data and should be considered for investigation.

Hampton Place

According to Alexander, the vegetative growth at this site threatens the archeological resources with bioturbation. “This is a process of soil disturbance that results from the growth of plant roots below the surface of a site.”¹⁹ Invasive nonnative vegetation requires removal. This report recommends maintenance as an open understory composed of a mix of native grasses and forbs. Removal shall be conducted manually where possible with sensitivity to underlying archeological resources.

Vulcan Site

According to Alexander, the north-south extent of this site was never determined.²⁰ The boundaries of this site should be determined using archeological testing and any property containing resources should be obtained by the federal government. Once the boundary has been determined, invasive nonnative vegetation within the federally owned area should be removed. The site should be maintained as an open understory composed of a mix of native grasses and forbs. Removal shall be done manually where possible

19. *Ibid.*, 170.

20. *Ibid.*, 164.

with sensitivity to underlying archeological resources. The golf course located on the northern section of this site has provision for the treatment of unexpected archeological discoveries in consultation with the NPS as part of their lease agreement.

Mallards Dozen

Potential bioturbation requires addressing in this area. Invasive nonnative vegetation should be removed. The site requires management as an open understory composed of a mix of native grasses and forbs. Removal shall be done manually where possible with a sensitivity to underlying archeological resources.

Woodland Mound Complex

Only one of the mounds in the Woodland Mound complex is currently under federal management. The federally owned mound should be managed as follows. If ownership of the other mounds occurs in the future, the entire Woodland Mound complex should be mapped with modern survey equipment capable of determining ground elevations. Those mounds that are in open grassed areas require maintenance to prevent further erosion. The following are vegetation recommendations for the Woodland Mounds:

- Grass on the mounds should be allowed to grow tall (over one foot) which will discourage visitors from walking on the earthworks. Similarly, establishment of a no-mow strip of tall grass at the base of the mounds will discourage activities that may damage the resources.
- Develop a monitoring schedule that regularly records the condition of the mounds and identifies developing issues needing attention.
- Develop and implement an integrated pest management plan.

- Animal burrows and windthrow requires quick repair to avoid additional damage to the resource.
- Erosion on and adjacent to mounds requires addressing in a timely manner to prevent additional damage to the resource. Temporary stabilization procedures are justified to immediately arrest erosion, but these temporary erosion control devices must be removed as soon as a long-term solution can be executed. Temporary erosion control devices may include silt fences, riprap, or gabions.

Old Federal Road Tract

A section of the old federal road has recently been located using GIS and a path with wayside panels has been established along the alignment. This path connects to another path constructed by the NPS, which leads to an interpretive area along the riverbank just north of the Brown's Ferry site. From this vantage point, visitors can view the Brown's Homestead and Ferry from NPS property. A gravel parking lot was constructed to service the trailhead allowing for vehicular parking along Moccasin Bend Road. The park should continue to delineate the old federal road alignment and provide interpretation of its history for visitor education and enjoyment. Interpretive themes for this route have been identified in the long-range interpretive plan.

Noncontributing features such as remnants from 20th-century home sites and the racetrack could be removed from the property.

Brown's Homestead and Brown's Ferry Site

If the homestead site is acquired by the NPS, archeological investigation should be performed to verify and delineate the homestead site. Delineation could include an interpretive sign and "ghosting" of the footprint of the structure.

An attempt should be made to acquire the eastern bank of the Brown's Ferry crossing site from the City of Chattanooga (Moccasin Bend Wastewater Treatment Facility). This site is an essential part of the story of the federal road and the role of this site in the Trail of Tears. A conservation easement should be explored to protect the view to the opposite (west) shore ferry crossing location. The long-range interpretive plan outlines several interpretive themes for this site including the Trail of Tears, the role of the site in a larger network of trade routes, and multicultural contact.²¹

Stringers Ridge Civil War Sites

The 2006 revised preservation plan for Civil War resources by White Star Consulting thoroughly details preservation techniques for each known Civil War-era resource within the national historic landmark. The following cultural landscape recommendations follow those detailed guidelines. Any future interpretive activities at the Civil War-era sites should include provision for pedestrian access to the site features. A walking trail system with interpretive marker placement is proposed in the White Star report (map 18). However, this trail includes a visitor center at the private residence located just west of the Stringers Ridge sites. All visitor activities should originate from the proposed Moccasin Bend Interpretive Center. This residential property could be used for access to the walking trail system.

Road System and Encampment Sites

According to the White Star report, the Civil War encampment sites and road traces are vulnerable to erosion caused by motorized vehicle use and foot traffic. Tree throws also threaten to damage encampment sites. All motorized and bicycle traffic should be eliminated from known road traces as these

21. National Park Service, 2011, 20.

uses encourage erosion. All assumed routes that have not been yet ground verified, should be located with archeology and surveyed.

Vegetation

Vegetation within the Civil War sites should be maintained unless recommended otherwise (see sections on views and earthworks). The mature forested canopy should be maintained in a condition consistent with the Civil War period of significance.

Views

As possible, several views from the Stringers Ridge Civil War sites should be restored. Approximately 200 feet of viewshed should be cleared at the eastern lunette of the 10th Indiana Battery positions, “facing east in the direction of Chattanooga and south in the direction of Lookout Mountain. This viewshed should be selectively cleared, rather than being clear-cut. This viewshed should be cleared with great attention to minimize ground disturbance.”²² The viewshed looking west from the northernmost 18th Ohio Battery earthwork should be rehabilitated to allow a view over to the western edge of Moccasin Bend. From this observation point, visitors will be provided with a wider ranging view across Moccasin Bend revealing its unique physiographic features.

Earthworks

All Civil War-era earthworks and earthwork remnants should be stabilized and preserved. Currently the earthworks on Moccasin Bend “are protected from significant erosion by various amounts of overhead tree cover and tree debris and humus,”²³ but they are “endangered by a combination of erosion, foot

traffic, and tree growth.”²⁴ Visitors should gain access to these earthworks in such a way that does not damage the resources. The earthwork management policies should be sustainable and consider the larger ecological impact of the management practices.

- Stabilize historic vegetation growing on historic earthworks or on potential archeological resources to reduce the short-term risk of windthrow. If preservation of the earthworks or historic vegetation appear to conflict, priority should be given to the protection of the earthwork.
- Develop a long-term tree removal and replacement program that eliminates trees growing on historic earthworks or on potential archeological resources. However, because forest cover provides the most sustainable form of earthwork protection, trees growing off the earthworks, but whose canopy overhangs the earthworks, should be protected. Natural succession and additional planting should be promoted to provide a protective canopy over the earthworks.
- Maintain condition of adequate tree cover and ground layer of thick deciduous tree leaf humus where possible.
- Establish or maintain a vegetative cover over all the earthworks that do not have full forest cover. Use a mixture of grass species that will properly protect from erosion. The grass mixture should include species known to perform well in the park and that are noninvasive.
- Grass on the earthworks should be allowed to grow tall (over one foot), which will discourage visitors from walking on the earthworks. Similarly, establishment of a no-mow strip of tall grass at the base of the earthworks will discourage activities that may damage the resources.

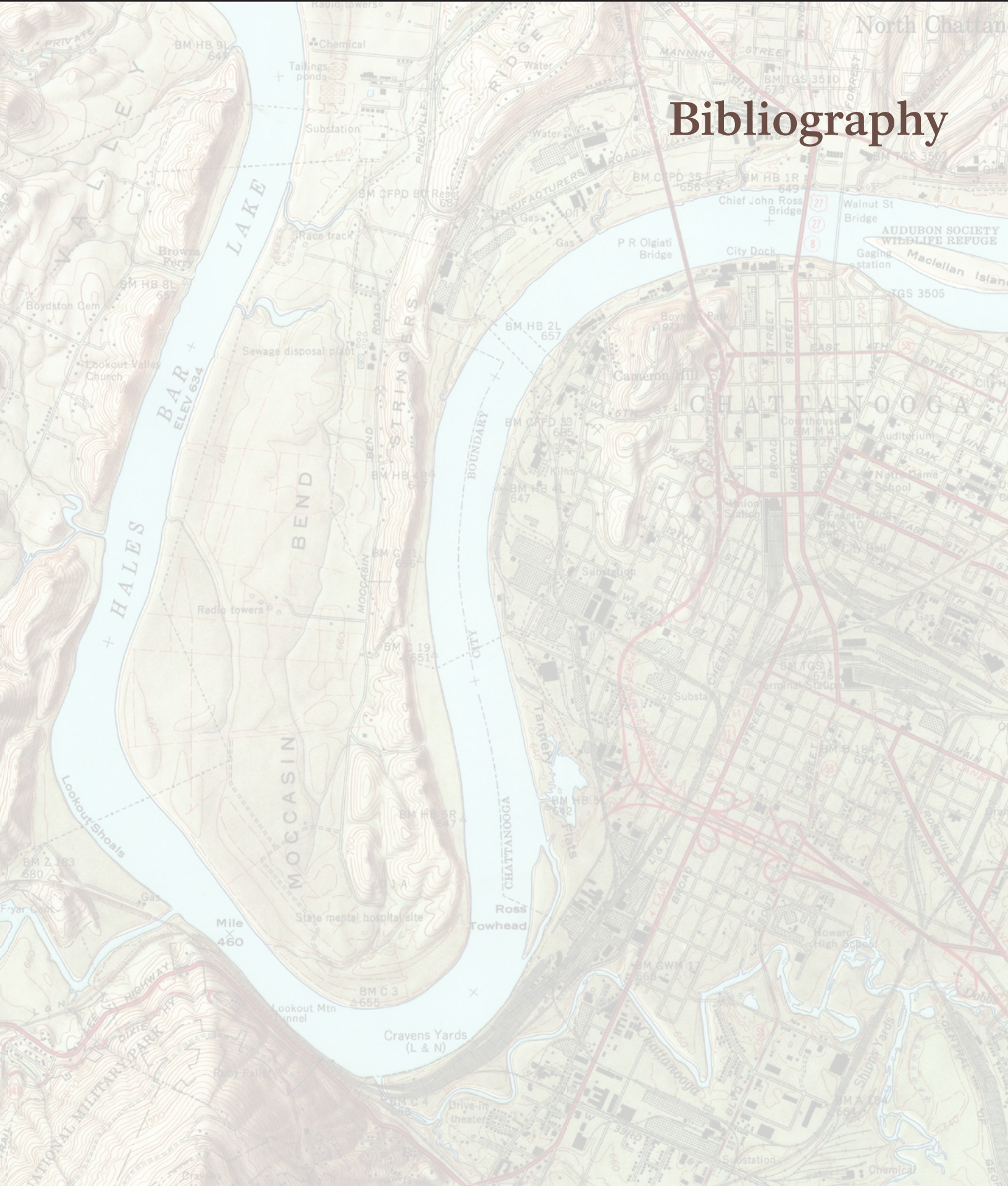
22. White Star, 109.

23. *Ibid.*, 106.

24. Alexander, 158.

- Develop a monitoring schedule that regularly records the condition of the earthworks and identifies developing issues needing attention.
- Develop and implement an integrated pest management plan.
- Animal burrows and windthrow needs quick repair to avoid additional damage to the resource.
- Erosion on and adjacent to earthworks needs addressing in a timely manner to prevent additional damage to the resource. Temporary stabilization procedures are justified to immediately arrest erosion, but these temporary erosion control devices must be removed as soon as a long-term solution can be executed. Temporary erosion control devices may include silt fences, riprap, or gabions.

Bibliography



About the *Bibliography* divider: United States Geological Survey of Chattanooga, Tennessee. Mapped and edited by Tennessee Valley Authority. Published by the Geological Survey in 1958.

Located online in the U.S. Topo and Historical Topographic Map Collection: <http://geonames.usgs.gov/pls/topomaps/>

BIBLIOGRAPHY

Alexander Archeological Consultants, Inc.

- 2010 "Moccasin Bend National Archaeological District: Archaeological Overview and Assessment, Vol. 1." Wildwood, Georgia.

Belknap, Charles E.

- 1899 *History of the Michigan Organizations at Chickamauga, Chattanooga, and Missionary Ridge, 1863*. Lansing, Michigan: Robert Smith Printing Company. (1897, 2nd ed., with only minor differences.)

Brose, Davis S. and Isaac Gerber

- 1982 "The Ringler Archaic Dugout from Savannah Lake, Ashland County, Ohio: With Speculations on Trade and Transmission in the Prehistory of the Eastern United States," *Midcontinental Journal of Archaeology* (Vol. 7, No. 2): 245-282.

Chattanooga Hamilton County Regional Planning Agency

- 2002 "Chattanooga Urban Area Bicycle Facilities Master Plan, April 2002." Available on the Internet at <http://www.chcrpa.org/TPO_reorganized/Plans_and_Programs/Multi-Intermodal_Land_Use_and_TransPlanning/Bicycle-Pedestrian_Planning/Chattanooga_Urban_Area_Bicycle_Facilities_Master_Plan.htm>

Chattanooga News Free Press, 26 July 1957-26 April 1983.

Chattanooga Regional Anthropological Association(CRAA)

- 1982 "Proposal for Archaeological/Historic Assessment of Cultural Resources on Moccasin Bend, Hamilton County, Tennessee," Chattanooga, Tennessee: CRAA.

Chattanooga Times, December 8, 1949-August 28, 2004.

Chattanooga Times Free Press, March 17, 2001- November 5, 2011.

Churnet, Habte G.

- 1997 *Seeing Southeastern Geology through Chattanooga*. Red Bank, Tennessee: HGC Publishers.

City of Chattanooga.

- 2012 "Interceptor Sewer." Available on the Internet at <<http://www.chattanooga.gov/public-works/waste-resources/interceptor-sewer>> (accessed June 4, 2012).

Cook, John

- 1963 Letter to Charles Jeffers, August 29. CHCHNMP Archives.
- 1964a Letter to Mrs. Sim Perry Long, August 19. CHCHNMP Archives.
- 1964b Letter to Regional Director, April 29. CHCHNMP Archives.
- 1966 Letter to Regional Directory, March 28. CHCHNMP Archives.

Cox, Elbert

- 1966 Letter to Mrs. Sim Perry Long, March 24. CHCHNMP Archives.

Dunn, Charles

- 1959 Letter to Elbert Cox, NPS Regional Director, 18 March. CHCHNMP Archives.

Hutt, Sherry Hutt and Jaime Lavallee

- 2005 *NATHPO Tribal Consultation, Best Practices in Historic Preservation*. Report prepared for the National Association of Tribal Historic Preservation Officers, Washington D.C.

Jolley, Harmon

- 2010 "River City Racing – the Moccasin Bend Speedway," The Chattanooga.com, February 20, 2010. Accessed via the Internet at <<http://www.chattanooga.com/2010/2/20/169388/River-City-Racing---the-Moccasin-Bend.aspx>> (accessed June 15, 2012).

Keister, O.B., Jr., Mrs. Z Carter Patten, and Lou Williams

- 1958 "Report of the Committee of Three In Regard to the Development of Moccasin Bend, Chattanooga, Tennessee."

Kidd, Steven R. Trip

- 2009 "Report on Archeological Survey of Possible Visitor's Center Locations at Chickamauga and Chattanooga National Military Park (CHCH), Moccasin Bend National Historic Landmark (MOBE)." Tallahassee, FL: Southeastern Archaeological Center, National Park Service.

Long, Mrs. Sim Perry.

- 1966 Letter to Elbert Cox, NPS Regional Director, March 16. CHCHNMP Archives.

Lord Aeck Sargent Architecture and Design Firm

- 2012 *Moccasin Bend Interpretive Center, Chattanooga, Tennessee, CHCH/MOBE 149774*. Prepared for the National Park Service. Atlanta, Georgia.

McPherson, James

- 2003 *Battle Cry of Freedom: The Civil War Era*. Oxford: Oxford University Press.

Moccasin Bend Association

- 1983 "Public Statement to the Moccasin Bend Task Force." November 15, 1983.
- 1961 Letter to Stewart Udall, Secretary of the Interior, copy in CHCHNMP Archives, May 27, 1961.

Moccasin Bend Heritage Association

- 1998 "Moccasin Bend Tennessee: Draft Cooperative Management Plan and Environmental Assessment." Report prepared for the National Park Service, September 1998.

National Park Service, U.S. Department of the Interior (NPS)

- 1993 "Vegetation Communities of Chickamauga Battlefield National Military Park, Georgia: Technical Report NPS/SERCHCH/NRTR-93/11."
- 1996 *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Washington, D.C.: National Park Service.
- 2006 *Management Policies*.
- 2009 *Moccasin Bend National Archeological District: Development Concept Plan, Environmental Assessment/Assessment of Effect*. Denver Service Center.
- 2011 *Moccasin Bend National Archeological District Long-Range Interpretive Plan*. Harpers Ferry Center.

Partridge, Charles

- 1887 *History of the Ninety-Sixth Regiment, Illinois Volunteer Infantry*. Chicago, Illinois: Brown, Pettibone & Company, Printers.

Richardson, Pearl

- 1934 "Moccasin Bend," Unpublished article dated April 27.

Southeastern Archeological Center

- 2006 "Trip Report on Archeological Survey of possible Visitor's Center locations at Moccasin Bend National Historic Landmark (MOBE)." Report Prepared for the National Park Service, September 11-22, 2006.

“Special Meeting of Moccasin Bend Association and Interested Parties”

1960 Meeting minutes, copy in CHCHNMP Archives, June 16, 1960.

Tennessee Conservationist

1950 “Historic Panorama is Saved,” March/April 1950: 18-19.

Thornberry-Ehrlich, Trista L.

2009 “Geologic Resources Inventory Scoping Summary: Chickamauga and Chattanooga National Military Park, Georgia and Tennessee.” Report prepared for the National Park Service, August 5, 2009.

Townsend, Gavin

2010 “Mario Bianculli, Chattanooga’s First Modernist,” *ARRIS: The Journal of the Southeast Chapter of Architectural Historians*, Volume 21.

Udall, Stewart, Secretary of the Interior to Mrs. Sim Perry Long

1961 Untitled Letter, CHCHNMP Archives.

Urban Land Institute (ULI)

1982 “Moccasin Bend Chattanooga, Tennessee: An Evaluation of Land Use and Development Strategies for the Chattanooga-Hamilton County Regional Planning Commission, Washington D.C.: ULI.

U.S. Army Corps of Engineers, Nashville District

2009 “Proposed Stream Bank Stabilization Tennessee River Miles 457.2 to 463.1, Chattanooga, Hamilton County, Tennessee.” Report prepared for the National Park Service, May 2009.

United States Department of Agriculture, Natural Resources Conservation Service (USDA/NRCS)

1996 *Engineering Field Handbook*, Chapter 16: Streambank and Shoreline Protection. Washington, D.C.

Wheeler, Ryan J., et. al.

2003 “Archaic Period Canoes from Newnans Lake, Florida,” *American Antiquity*, Vol. 68, No. 3 (July 2003): 522-551.

White Star Consulting

1998 *Preservation and Interpretation Plan For Civil War Resources Located At Moccasin Bend National Historic Landmark, Chattanooga, Tennessee*. Mount Pleasant, Tennessee: White Star Consulting.

Appendices



About the *Appendices* divider: United States Geological Survey of Chattanooga, Tennessee. Mapped and edited by Tennessee Valley Authority. Published by the Geological Survey in 1969.

Located online in the U.S. Topo and Historical Topographic Map Collection: <http://geonames.usgs.gov/pls/topomaps/>

APPENDIX A: ARCHEOLOGICAL CONSIDERATIONS IN INTERPRETING THE MOCCASIN BEND LANDSCAPE

INTRODUCTION

In many historic landscape studies, archeological resources are a minor element of the overall management and interpretive spectrum. Often, the archeology is only minimally known or studied. In the present case, however, the existence of this park unit is due to the richness of its archeological record, and the breadth of prior research.

The NPS guidance on cultural landscape reports does not offer detailed information on the expectations for the archeological element of the cultural landscape report (Page et al. 1998:25):

Cultural landscape research builds a better understanding of the relationship between cultural and natural resources in a park. A cultural landscape report can, therefore, provide a general framework for resource management. Cultural landscapes often include other cultural resources, such as archeological sites, historic structures, and ethnographic resources, so site-specific information about these resources is part of the CLR documentation process.

This guidance is slightly off point in the current case, due to the thoroughness of the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” prepared by Alexander et al. (2010). The three-volume report by Alexander et al. is a detailed study of the history of research, the archeological contexts, and the archeological resources of the park unit. Our present study, then, becomes a summary of a summary.

More accurately, the goal of the present study is to present an abbreviated synthesis that will allow park planners to consider the archeological record without having to personally cull data from the “Moccasin Bend National Archeological District: Archeological Overview and Assessment.” It is necessary to say early in this document that our goal in no way should be interpreted as being critical of the archeological overview and assessment. The archeological overview and assessment is one of the most thoroughly researched and detailed documents of its kind. It is a wonderful document for archaeologists to have on their reference shelves, but it is not necessarily user friendly for the non-archaeologist. Our goal here, then, is to take the excellent information provided in the archeological overview and assessment and briefly synthesize it in a format more useful to planners.

Our research was totally secondary review of documents prepared by others. The vast majority of these documents were previously captured in the archeological overview and assessment. We also reviewed two research efforts undertaken by the Southeast Archeological Center since the completion of the archeological overview and assessment. Our understanding of the landscape and its resources benefitted from a tour of the park unit guided by Ranger Jim Ogen.

PREHISTORIC OVERVIEW

When laypersons read a typical cultural history, they often mistakenly surmise that it is all about point types and pottery varieties. To those unfamiliar with the terminology, it can be quite intimidating. In reality, our focus on temporally diagnostic artifacts (items known to have been

made in a restricted period) is because these items give us the time control to address continuities and changes in cultural adaptation through time. These items provide a structure for discussions of settlement, subsistence, and past lifeways. The following overview is written specifically for readers and users of the cultural landscape report. This has been synthesized from the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” and interested scholars are directed to that document for a more detailed, fully referenced discussion (Alexander et al. 2010).

Paleo-Indian Period (10500–8000 BC)

The Paleo-Indian period has traditionally been divided into three subperiods, based on changes in projectile point/knife forms (this summary drawn from Alexander et al. 2010:31-33). Recent research in the eastern United States has suggested that the period may have started earlier, and that a fourth subperiod (Pre-Clovis) may be warranted. This ongoing debate underlines how little we really know about some aspects of past life in North America. To date, a Paleo-Indian site has not been found on Moccasin Bend, but a Beaver Lake point was found in later deposits at site 40HA133, and a Late Paleo-Indian, Greenbrier point was found at 40HA440 (figure 2.2 and 2.3) (Alexander et al. 2010:Appendix A; Kidd 2009). There is a potential for undiscovered Paleoindian sites wherever alluvial deposits have buried terminal Pleistocene land surfaces. Now, we do not know the nature of Paleo-Indian use of Moccasin Bend.

Pre-Clovis Subperiod (?–10500 BC)

In several sites in the eastern United States, archaeologists have found materials buried beneath materials from the Early Paleo-Indian Clovis subperiod. By the law of superposition (in an undisturbed context, older things will be found beneath younger), these deepest deposits should pre-date Clovis. Hence, the Pre-Clovis label. Direct dates for these deposits are far from convincing, and so far nobody has defined a Pre-Clovis tool form that is distinctive from Clovis tool forms. The two schools of thought on this issue are 1) these must be Pre-Clovis deposits, and we just have not excavated enough to find the distinctive tools; or 2) these are simply a few items displaced from the base of the Clovis deposits by root action, rodent holes, or crayfish burrows.

If there is a Pre-Clovis subperiod, we can only infer that it was probably similar in adaptation to that of the subsequent Clovis sub-period. These people probably traveled in small groups over a large area each year. Their seasonal round may have included scheduled visits to outcrops of high quality chert, the stone they preferred for making their tools.

Early Paleo-Indian Subperiod (10500–8900 BC)

One of the iconic prehistoric artifacts of the Southeast is the Clovis point, which marks the Early Paleo-Indian subperiod. The points are well-made, lanceolate forms with flakes removed from one or both faces to form distinctive flutes. The Clovis point was first recognized in the western United States, and similar points are found throughout much of the country during this period. Low site count, small site size, and low artifact counts suggest that there was low population density, and that settlement involved small groups of highly mobile hunter-gatherers.

Middle Paleoindian Subperiod (8900–8500 BC)

The Middle Paleo-Indian subperiod is marked by a changed to slightly eared, fluted points of the Cumberland/Redstone types. As throughout the Paleo-Indian period, the tool makers showed a strong preference for high quality chert. It has been suggested that their annual movements were tethered to key chert quarry sites. The Middle Paleo-Indian subperiod is best represented by surface finds of isolated projectile points.

Late Paleo-Indian Subperiod (8500–8000 BC)

Beaver Lake, Quad, Dalton, and similar unfluted lanceolate points mark the Late Paleo-Indian subperiod. There seems to have been an increase in site frequency during this subperiod, with a focus on river terrace settings. As for all of the Paleo-Indian period, we know little of their subsistence patterns. The large points and stone scrapers suggest a focus on large game, but this may be biased by which materials survive.

Archaic Period (8000–700 BC)

The Archaic period captures more than 7,000 years of adaptation, as the Holocene climate and vegetation became established (this summary drawn from Alexander et al. 2010:33-37). Throughout the period, a hunter-gatherer-fisher subsistence strategy was followed. By the end of the Archaic, people were beginning to experiment with plant horticulture. In the Southeast, the Archaic is commonly associated with white tail deer and hickory nuts.

Archaic period components are known at sites 40HA63, 40HA133, 40HA139, 40HA140, 40HA146, 40HA147, and 40HA521 (Alexander et al. 2010: Appendix A). There has been only limited examination of Archaic-period deposits in alluvial contexts, and there is a high potential for additional, significant Archaic sites in the unit.

Early Archaic Subperiod (8000–6000 BC)

A uniform sequence of projectile point styles marks this subperiod; Big Sandy/Early Side-notched (earliest); Kirk; Bifurcate Base; and Cypress Creek (latest). End scrapers – a tool form associated with either hide scraping or woodworking – are common throughout the subperiod. Although the Paleo-Indian period was best known from isolated finds, the Early Archaic saw an apparent increase in the number of more substantial sites, typically buried deep below alluvium. It is unclear if the increase in preserved sites reflects changes in prehistoric behaviors or is the product of different depositional/erosional regimes.

Middle Archaic Subperiod (6000–3000 BC)

The Middle Archaic also has a sequence of point types: Eva/Morrow Mountain, then White Springs/Sykes, and then Benton. This time span saw the first appearance of shell middens or mounds, and settlement focused on the rivers. Sites are larger, with higher artifact frequency, than in previous periods. Storage pits first appeared in the Middle Archaic, suggesting increased sedentism and perhaps an increased emphasis on wild plant resources.

Late Archaic Subperiod (3000–700 BC)

The onset of the Late Archaic appears related to a stabilization of a climate much like today's. A sequence of projectile points marks the subperiod: Pickwick/Ledbetter, Little Bear Creek, Rounded Base, and Wade. By late in this subperiod, steatite (or soapstone) bowls make their appearance. These occur only in Late Archaic, and the bowls or raw material would have originated in the Piedmont of Alabama, Georgia, South Carolina, or North Carolina. The Late Archaic is the first period when large, intensively occupied hamlets or villages are common in the archeological record.

Woodland Period (700 BC–AD 1000)

The Woodland period is distinguished from its predecessor by the beginning of wide-spread manufacture and use of clay pottery, and by a significant emphasis on horticulture (this summary drawn from Alexander et al. 2010:37-39). The trend toward increased sedentism and a riverine/floodplain focus continued from the terminal Archaic. The Woodland is divided into three subperiods based on pottery and projectile point types.

The Woodland period is well represented by large residential and mortuary sites in the unit. Woodland components are known from 40HA63, possibly 40HA130, 40HA133, 40HA140, 40HA141, 40HA142, 40HA143, 40HA144, 40HA145, 40HA146, 40HA147, 40HA440, 40HA517, and 40HA521 (Alexander et al 2010:Appendix A).

Early Woodland Subperiod (700–200 BC)

This subperiod is marked by the presence of quartzite- or limestone-tempered pottery, and Adena, Dickson, Gary, Flint Creek, and Morhiss projectile points. Temper is an aplastic material added to a clay paste to enhance its performance attributes, and the use of certain tempers varied through time and space. Gardening in this subperiod focused on oily seed crops; maize was not yet a major factor in their subsistence.

Middle Woodland Subperiod (200 BC–AD 600)

The first half of the subperiod is marked by plain, fabric-impressed, and check-stamped pottery on a limestone-tempered paste. In the later half, plain, simple-stamped, brushed, and cord-marked decorations occur on limestone-tempered pottery, and sand-tempered pottery occurs with plain, simple stamped, and brushed decorations. The subperiod saw the local development of the Copena Mortuary complex, a local manifestation of the Hopewell interaction sphere. Hopewell was marked by an extensive network for long-distance trade of key items, and this network also exported the practice of burial in earthen or stone mounds.

Late Woodland Subperiod (600–1000)

The peoples of eastern Tennessee held onto their Woodland way 100-200 years longer than in other areas of the Southeast. Two complexes are known from this subperiod. The earlier, Hamilton complex has limestone-tempered pottery with plain, cord-marked, brushed, and red-slipped

finishes. The Roane-Rhea complex is dominated by plain, limestone-tempered pottery, with minor amounts of cord-marking and simple-stamping, and with rare example of punctuated, incised, and red-slipped pots. Hamilton triangular, Jacks Reef Corner Notched, and Jacks Reef Pentagonal points occur. Mound burial continued in this subperiod. The Late Woodland peoples were on the cusp of becoming Mississippian, and the presence of shell-tempered pots as grave goods in Late Woodland mounds suggests growing contact between the local Late Woodland populations and Mississippian groups of surrounding regions.

Mississippian Period (1000–1630)

The defining traits of the Mississippian period are generally shell-tempered pottery, a shift from round to rectangular houses, intensive bean/maize/squash horticulture in floodplains and terraces, temple mound ceremonialism, and the development of chiefdoms as the primary political order (this summary drawn from Alexander et al. 2010:39-42). These traits were not all accepted at the same rate or same time, and shell-tempered pottery often becomes the default marker of the Mississippian period.

The Mississippian period is represented by two large villages and several smaller sites. Sites 40HA63, 40HA141, 40HA146, 40HA440, possibly 40HA517, 40HA521, and 40HA523 have Mississippian components (Alexander et al. 2010:Appendix A).

Early Mississippian Subperiod (1000–1200)

The Early Mississippian subperiod corresponds to the Hiwassee Island phase (or the Mississippian I and II horizons) in our area. Early in this subperiod, there is a co-occurrence of limestone-tempered pottery (often made in classic Mississippian forms) and shell-tempered pottery. By the end of the subperiod, the contribution of limestone-tempered pottery had dropped to less than twenty percent of the vessels. Small triangular arrow points are prevalent. It was during this period, that site hierarchies become common, with multi-mound villages, single-mound villages, villages and hamlets without mounds, and isolated farmsteads. Mound function shifted from simply providing a marker for burials to supporting ceremonial houses/temples. Intensive agriculture was pursued, but a wide range of wild resources still contributed to the diet.

Middle Mississippian Subperiod (1200–1500)

This span is recognized as Classic Dallas culture in our area. The pottery is all shell-tempered, with plain surface finishes most common. It is also in this subperiod that extra-local trade pots are a notable presence, as well as copper items, exotic stone pipes and celts, and artifacts made of marine shell. These trade items and an associated iconography (the Southeastern Ceremonial complex) are seen as tools to help preserve the status of key players in the social hierarchy. Powerful chiefdoms had developed by this time, with leaders controlling ceremonialism and demanding tribute from people and communities under their power.

Late Mississippian Subperiod (1500–1630)

Late Dallas culture is found locally during this subperiod. To some extent, the previous period marked the zenith of Mississippian development, and the Late Dallas saw a de-emphasis of mound construction and ceremonialism. The trade and allegiance networks that served to integrate broadly Mississippian groups faltered, and we see adjustments to the site hierarchy. The small outlying farmsteads and hamlets are abandoned, and palisades (defensive borders) become prevalent at the village sites. The pottery began to mimic the Lamar developments in Georgia, with wide-lined incising and carinated bowls (or cazuelas) becoming common.

HISTORIC OVERVIEW

American Indian and European Contact Period (1513–1760)

The Late Mississippian subperiod overlaps with the first European incursions into the Southeast, and some of the observed changes may have been the result of introduced disease epidemics (this summary drawn from Alexander et al. 2010:42-45). The local populations in the 16th century have been identified as Eastern Muskogean, speakers of the Koasati dialect. There is an ongoing debate regarding the route of De Soto and later De Luna and the location of communities they visited. Some have suggested that Moccasin Bend may have been the location of the principal town of Chiaha, visited by De Soto in 1540. Other have argued that the Mississippian towns of Moccasin Bend were visited in the 1560s by De Luna. Regardless, by 1630, Mississippian groups had vanished from the area, apparently moving south into Alabama. There was no major Indian presence in the area until late in the 18th century.

The project area appears to have been lightly utilized by the Cherokee in the 18th century, but no towns are known for Moccasin Bend (Alexander et al. 2010: Appendix A). As colonial expansion began to pressure the Cherokee in their traditional homelands, they expanded into eastern Tennessee and formed an alliance with the British. The Cherokee first sided with the British in reducing French influence on the western frontier, and subsequently fought with the British against the American rebels in the Revolutionary War. In response, the rebel militias destroyed all of the Middle and Valley towns and many of the Overhill towns.

Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal (1760–1860)

In response to the 1776 destruction of Cherokee towns, Chief Dragging Canoe and his followers established the 11 Chickamauga towns in the Chattanooga area (this summary drawn from Alexander et al. 2010:42-45). After the Revolutionary War, most Cherokee leaders were trying to finalize a settlement with the Americans, ceding all the Cherokee lands east of the Appalachians in exchange for peace. However, the Chickamauga towns continued to resist efforts to establish peace, but the settlement ultimately prevailed.

The Federal Road was constructed across Moccasin Bend in 1805. This period saw increased trade and missionary efforts among the Cherokee, and the project area sat at the frontier. The Browns settled on Moccasin Bend, ran Brown's Ferry (where the Federal Road crossed the river) and a

tavern, and farmed in Anglo-American style. The Browns were a mixed blood, Anglo-Cherokee family. This allowed them to reside in Cherokee country starting circa 1805, and then enter a land claim after the United States took possession of Moccasin Bend in 1819.

The ongoing Anglo-American desire for Cherokee lands culminated in the Treaty of New Echota in 1835 (ratified in 1836). The treaty called for the Cherokee to cede all lands east of the Mississippi and to relocate to reservations in what was to become Oklahoma. The relocation process did not materialize as envisioned by the Cherokee. In 1838, all of the Cherokee in Georgia, Alabama, and southeastern Tennessee were forcibly removed from their homes and gathered in holding compounds. One such compound was in Chattanooga. Beginning in spring 1838, the Cherokees were forced to walk westward on the infamous Trail of Tears. The Cherokees who had been retained in Chattanooga began their journey west along the Federal Road through Moccasin Bend.

In 1820, John Brown was issued a 640-acre reservation that encompassed much of Moccasin Bend. In 1830, this property was sold to the Hixsons, who operated the former Brown's Ferry as Hixsons Landing.

By 1824, whites had begun purchasing lands to the south of the Brown reservation (Alexander et al. 2010:53-55). Prominent early landowners on the southern one-half of Moccasin Bend included George Russell, R.G. Waterhouse, W.M. Rodgers, James Nyland, James Green, Euclid Waterhouse, and George Birdwell. The tracts of Moccasin Bend underwent splitting, combination, and multiple sales. By 1860, key landowners included Cobbs (233 acres), Adams (233 acres), the Summermans (acreage unknown), Blevins (14 acres), and Gamble (130+ acres). An 1863 chart suggests that there may have been eight residential clusters on Moccasin Bend before the war.

Moccasin Bend played a crucial role in the Chattanooga-area conflicts during the Civil War (Alexander et al. 45-57). The Federals constructed multiple earthworks for gun emplacements, and improved the Federal Road to serve as a vital supply line. The presence of the Tennessee River and rail lines in Chattanooga made the city a target for the Union advance which began in western Tennessee in 1862, but which did not turn its focus to Chattanooga until the summer 1863. Federal pressure from Rosecrans forced Bragg and his Confederate States Army (CSA) troops to fall back to Chattanooga.

The Union States Army was successful in dislodging the Confederate States Army from Chattanooga, but the two armies met just over the Georgia state line at Chickamauga Creek. On September 19-20, 1863, the Confederate States Army under Bragg defeated the Federals, who now fell back to Chattanooga. Unable to conduct a classic siege of the city, Bragg determined to force a Federal surrender or retreat by cutting supply lines. With Bragg's men positioned to disrupt traffic on the major rail lines into the city, it became imperative that the Federals in Chattanooga receive supplies via a combined river and overland route. Federal boats were able to approach up the Tennessee River, avoiding the Narrows (a navigational hazard) by landing on the west side of Raccoon Mountain. From here, supplies went overland to the river crossing at Brown's Ferry. After crossing the Tennessee River, the supplies moved across the top of Moccasin Bend along the improved Federal Road, and then across the river again into Chattanooga.

It was obviously important that the Union States Army hold Moccasin Bend and the key river crossings. As well, Moccasin Bend provided suitable battery location from which to harass CSA batteries on Lookout Mountain and Bald Hill. The construction of Federal batteries began on September 24 with a major earthwork complex established on the southern end of Stringers Ridge, and an additional battery to protect the pontoon bridge at Brown's Ferry. The positions were

strengthened and modified to changing conditions over the next month. Late October saw an action in which the Moccasin Bend artillery supported actions to dislodge CSA troops from the vicinity of Brown's Tavern, on the western side of the river. This successful action completed the opening of the Cracker Supply Line. Moccasin Bend was heavily occupied with federal troops, at least through the assault on Missionary Ridge, November 25, 1863.

Through the remainder of the 19th century and the first half of the 20th century, much of Moccasin Bend was active agricultural land. Aerial photographs, post cards, and maps show expanses of pasture and plowed field over much of the area.

HISTORY OF RESEARCH

The history of research at Moccasin Bend presents an internal contradiction. On the one hand, there has been a lot of research interest in the rich archeological record of the area through the years. There have been a number of investigations, including the efforts that ultimately supported successful nominations of much of Moccasin Bend as a NRHP historic district and as a national historic landscape (Alexander et al. 2010:77-94). However, many of the prior research efforts saw minimal or no subsurface investigations, and no comprehensive survey has been conducted to modern professional standards. The portions of sites that received the most attention were those facing imminent destruction.

Table 1. Summary of Previous Research.

Project	Key Sites	Publication(s)	Library
Philadelphia Museum of Natural History	40HA130, 40HA142, 40HA143, 40HA144, 40HA145, 40HA146	Moore (1915 [2002])	Yes
University of Tennessee Knoxville	40HA63	Graham (1964)	
University of Tennessee Chattanooga	40HA146, 40HA134, 40HA394, 40HA395	Evans and Brown (1975) Evans (2002) Alexander and Council (1994)	
Chattanooga Regional Anthropological Association	40HA130 through 40HA147, 40HA394, 40HA395	McCullough and Bass (1983a, 1983b, 1983c, 1984) Evans and Karhu-Welz (1982) Evans (2002) Alexander (1993) McCullough et al. (1985)	
White Star Consulting	40HA131 through 40HA138, 40HA394, and 40HA395	White Star Consulting (1998)	
University of Alabama	40HA440	Spry and Hollis (1997)	
Alexander Archeological Consultants	40HA63, 40HA130, 40HA133, 40HA135, 40HA138, 40HA141, 40HA142, 40HA144, 40HA145, 40HA146, 40HA147, and 40HA517	Alexander et al. (2010)	
R. Christopher Goodwin and Associates	40HA140, 40HA146, 40HA147, 40HA141, 40HA440, 40HA517, 40HA521, 40HA522, 40HA523	Coughlin et al. (2006)	
Southeast Archeological Center	40HA440	Kidd (2006, 2009)	

ARCHEOLOGICAL SITES

On a typical tract of land, there are discrete archeological sites separated from one another by areas lacking artifacts, features, or cultural deposits. Typically, if sites are represented as black polygons, then a tract map may resemble a Dalmatian's coat. Technically, if two sites overlap, they are supposed to be recorded as a single site.

In the present case, the unit has such a rich archeological record that the site approach had to be altered. It was recognized by the Chattanooga Regional Anthropological Association that the unit contained a large number of overlapping archeological loci, and that there were not always the desired gaps between these loci. To deal with this rich landscape of overlapping components,

the rules were changed. A quick review of figure 2.1 shows several examples of sites that are directly adjacent to one another, with no intervening gap in cultural deposits. In these cases, site boundaries were drawn and designations were assigned somewhat arbitrarily, in an effort to bound specific site/loci types. These sites are also defined, generally, based on the most important (in terms of research or interpretive potential) temporal component. Therefore, sites may be divided based on the associated Civil War earthworks and camp features, even if other components (e.g., a prehistoric lithic scatter) straddles the border between two sites defined on their Civil War content.

This approach to site definition is not usual. However, it must be recognized that the option would have been to draw one or two massive sites (by the typical approach), each with multiple components. This would have created significant management confusion under Section 106, as huge sites are difficult to deal with in terms of avoidance or mitigation of effects. The earlier researchers recognized the rarity of the situation, a rarity that justified the successful NRHP and NHL nominations.

It should also be noted that very little of the park unit has been surveyed at an intensive level, and very few of the sites have been subjected to professional evaluation/delineation efforts. Therefore, the database must be considered preliminary and incomplete.

The following table presents the known sites. For each, a description is presented from the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” (Alexander et al 2010:Appendix A). In addition, the research potential and interpretive potential of each is addressed. The research potential references how significant a contribution could be gained from the archeological study of the site. It must be understood that a high research potential in no way implies that we are proposing an archeological study. Preservation in place will always be the preferred option. However, if future plans (e.g., a new parking area) or ongoing processes (e.g., erosion) threaten a site, it is important to know its relative research potential.

To understand research potential, it can be instructive to view the full spectrum of possible sites covering from a single, temporally undiagnostic artifact in disturbed contexts to a data-rich feature (e.g., a refuse pit) in sealed contexts in a well-preserved, well-dated site. To the non-archaeologist, it could become easy to get lost in the jargon of an extremely thorough (and lengthy) document such as the “Moccasin Bend National Archeological District: Archeological Overview and Assessment.” Under the points below, an attempt has been made to translate the jargon. In considering the research potential of prehistoric and contact period sites at Moccasin Bend, several key attributes are considered:

Presence/absence of vertically or horizontally discrete components. It is not unusual to see sites that have yielded large numbers of artifacts ultimately dismissed as having low research potential. It is not mere counts or volume of artifacts that matters; it is context. We cannot hope to understand the various activities that contributed to an archeological site unless we can vertically or horizontally segregate the various periods that contributed to the overall deposit. That is, if we cannot separate and individually analyze materials from the Early Archaic, Middle Archaic, and Middle Woodland periods, we can produce only a generalized (and uninformative) picture of averaged prehistoric behavior. So, archaeologists get excited when there is the potential to pull out each period of site use, one by one, for study and comparison.

Relationship of discrete components to environmental episodes. The value of a discrete site component is increased when it can be related to specific environmental conditions or episodes. With stratified (or stacked) deposits, the components are often separated by overbank flooding episodes, and the dating and nature of the deposits can assist in the reconstruction of past

landscape changes. Whether climatic changes, rises or drops in sea level, or shifts in river slope, we are better able to understand cultural responses when we can recognize possible prompts.

Presence/absence of temporally diagnostic artifacts. In the classic Western, John Wayne or some other hero pulls an arrow from a burnt wagon, examines the artifact, and declares “Apache” (or whatever the feared tribe of the movie is). Archaeologists can often do the same thing. The presence of projectile points/knives (arrowheads, spear points) or pottery of known types can provide a generalized date for a component. Such temporally diagnostic artifacts have been recovered from radiocarbon-dated contexts at other sites, and there is a general agreement on their date spans. Even if a site lacks datable carbon, we can gain some temporal control by considering the distributions of temporally diagnostic artifacts.

Presence/absence of datable organic materials. The research potential of a component increases significantly when it contains charcoal, bone, or shell that can be subjected to radiocarbon assay. Such an assay can provide a date for the component, whether or not temporally diagnostic artifacts are present.

Presence/absence of sufficient artifacts to support meaningful analyses. Indian loci on Moccasin Bend were not limited to multi-purpose, residential locations where many diverse activities occurred. In some cases, the Indian behavior was so ephemeral that very few artifacts were deposited and no features were created. Archaeologists are not well equipped to interpret sites with very few artifacts present. Many of the analyses used in modern archeology require large samples to draw statistical inferences.

Presence/absence of cultural features. Cultural features are the archeological signature of a short-termed, focused activity. Features can include storage pits, refuse pits, house floors, house posts, human burials, and caches. The survival of features is a good indicator of a relatively high level of site integrity. In addition, features are excellent locations for the survival of datable carbon, faunal bone, and ethnobotanical remains (seeds, stems, charcoal).

Presence/absence of black dirt or shell midden deposits. When reading archeological site descriptions, it is often easy to recognize the archaeologist’s excitement over the presence of midden. Midden reflects a level of activity that was so intensive or extensive that it literally changed the nature of the soils. In black dirt middens, the activities of the Indians added so much charcoal and other organics that the soil became blacker and more organic than the natural soil. In shell middens, sufficient shellfish were processed at the site to create essentially a human-produced soil dominated by shells. In both cases, the midden soils enhance the preservation of floral and faunal remains. With shell middens, the decay of the shells tends to mitigate the natural acidity of many soils in the Southeast, increasing the odds for preservation of faunal bone.

State of preservation of faunal and floral remains. A very basic question often asked of the archaeologist or the interpretive ranger is “What were the Indians eating?” Although we can draw some indirect inferences from artifacts (e.g., the presence of nutting stones may suggest the use of hickory nuts and acorns), direct evidence is preferred. When preservation conditions are good, the bone assemblage from a site can tell us what animal species were being processed, and in what proportion. The bones can also tell us what seasons the site was occupied, and what technologies were being used to capture and process the animals. Likewise, a consideration of the ethno botanical or floral record can tell us which wild and plant species were being targeted. Plant mix can also tell us the season of occupation, and charcoal samples can be used to characterize the surrounding forest communities.

Presence of human remains or mortuary features. Archaeologists can learn much from human burials. We can address burial customs, mode (primary, secondary, or cremated), and location (generalized refuse areas, sub-floor, ossuaries, mounds). The study of grave goods (items interred with the deceased) can contribute to our understanding of social status and differences in access to power and goods. It is recognized that the excavation of human burials is generally avoided when feasible on federal lands, but the commitment to avoid unnecessary disturbance of graves does not detract from the research potential.

Many of the above attributes also apply to historic sites on Moccasin Bend. Obviously, it will enhance research potential if a site has the preservation/deposits to reconstruct the diets of John Brown and his family. Other questions are more specific to archeological sites with historic components.

Ability to document military engineering. The Civil War use of Moccasin Bend included the construction of defensive features and infrastructure particularly suited to the local landforms, the military situation, and the strategies of the Union States Army and Confederate States Army. Where earthworks have survived, they provide the opportunity to document the field engineering, construction methods, and evolution of such structures. Likewise, it would be important to know if a site has the potential to tell us how pre-war features were enhanced to handle the wartime demands (e.g., the corduroying of the Federal Road).

Ability to document military lifeways, diet, and supply regimes. There was great variability in how soldiers adapted to their particular conditions through the course of the Civil War. There was not a single way in which living quarters were arranged or constructed. This varied with the landform setting, the threats, the season of the year, the experience of the unit and its leaders, and the available materials. Likewise, military supply regimes varied significantly by camp, by army, and by period of the conflict. Camp refuse features can be a major source of data. Although the topsoil at many camps has been extensively relic hunted, the vast majority of refuse at Civil War camps was carefully policed from the surface and deposited into large refuse pits. At Camp Baird, regimental camp of the 32nd USCT, over 97 percent of the artifacts from the site originated in four refuse pits.

Ability to document farmer lifeways. The residences and farmsteads of antebellum and post-bellum farmers on Moccasin Bend have garnered little attention. Indeed, such remains are commonly mentioned in asides from site discussions focused on other components. Although there are undoubtedly good archival data to support archeological investigations, incredibly little attention has been paid to these resources. We know virtually nothing of their building stock, the impacts of world events, and their success. Were these small farmer-owners, tenant farmers, or renters? What was the race and social status of the various farmers?

Ability to contribute to our knowledge of the Cherokee experience at Moccasin Bend. The unit has resources related to two significant themes in the broader Cherokee experience; the development of an elite Anglo-Cherokee trader/farmer class, and the forced exodus along the Trail of Tears. Resources related to the well documented Brown family holdings on Moccasin Bend could contribute archeological data to address the first.

INTERPRETIVE POTENTIAL

Interpretive potential is a related, but distinct, attribute. Interpretive potential is a subjective estimation of how important a particular site may be in telling the story of human-landscape interaction at Moccasin Bend. Interpretive potential does not always co-vary with research potential. For example, deeply buried Archaic deposits have a high research potential, but as they are buried more than a meter below surface, they have limited interpretive potential. In general, sites with visible surface features (e.g., Civil War earthworks, Woodland mounds, a Cherokee-era ferry, road, and cabin site) or prominent or clear natural features (e.g., the edge of a Pleistocene scarp) are more readily interpreted to the general public.

It should also be noted that interpretive potential can be a double-edged sword. Our ability to interpret such sites to the public often rests on the presence of surface features, and these same features can be negatively affected by visitor impacts. So, while it is easy to explain to the visitors the history of a gun emplacement on Stringers Ridge, pedestrian traffic over and around the earthwork may lead to erosional damage. As well, the clarity of the site function may make it a target for illegal looting activity.

Table 2. Summary of Research and Interpretive Potential.

Site	Description	Research Potential	Interpretive Potential
40HA63	Late Archaic, Woodland, Mississippian. Totally destroyed.	Archival and Collections re-search only.	Basic locational.
40HA112	Historic Cherokee, perhaps earlier. No field verification or site delineation.	Unknown. Potentially high to very high if Cherokee domestic locus has survived modern impacts. Also potential for Civil War deposits.	High to very high. The relationship of this site to the landing and the federal road make it of high interpretive value. This is one of the key sites for interpreting the historic Cherokee at Moccasin Bend. In present access conditions, interpretive potential is very low.
40HA130	Undetermined mound examined by Moore. Possibly prehistoric or Civil War.	Undetermined.	Low. The temporal origin of the mound has not been determined.
40HA131	Civil War lunette and parapet. Surface indications of lunette removed. Camp with tent pads also present.	High. Intact earthworks and camp-related features. Identities of occupying unit known. Part of 10th Indiana Battery.	High to very high. Parapet and tent pads have strong interpretive value. White Star also recommends reconstruction of lunette.
40HA132	Civil War lunette, possible powder magazine, rifle pits, roadbed, and camp hut locations.	High. Intact earthworks and camp-related features. Suspected powder magazine present. Identities of occupying unit known. Part of 10th Indiana Battery.	High to very high. Surface features readily interpreted to public. Site of key importance in local history. White Star has developed interpretive walking trail and signage for this site.
40HA133	Early-Late Archaic, Middle-late Woodland. Not fully delineated. Potential for Paleo-Indian deposits.	High to very high. Intact shell midden documented. Location suggests potential for stacked deposits, Paleo-Indian through Late Woodland.	Moderate to high. The view of a series of alluvial benches and levees attached to the Pleistocene terrace at this site provides a strong potential for interpreting changes in the alluvial landforms through time.

40HA134	Multiple Civil War camps, road system	High to very high. Multiple, distinct Civil War camp loci are present, with intact features. Camps of 22nd Michigan, 84th Indiana, 10 Indiana Battery present.	High to moderate. Camp features are present. Interpretive trail recommended by White Star passes through south end of site.
40HA135	Civil War redoubt, rifle pits, protected walkway, camp hut pads	High to very high. Intact earthworks present. Camp features present. Occupants of battery known. Potential of domestic occupation unknown. 18th Ohio Battery present in redoubt.	High to very high. Variety of earthwork features are present. Interpretive trail recommended by White Star passes through site and focuses on battery and other military features.
40HA136	Civil War encampment. Very minimal investigation	High. Camp features present. Identity of occupants not known.	High to moderate. Camp features are present. Interpretive trail proposed by White Star begins at site.
40HA137	Civil War gun placement	High to very high. Earthworks remain. Occupants of embrasure known. Two guns of 18th Ohio Battery were present.	High to very high. Well-preserved earthworks present. Interpretive trail proposed by White Star borders but does not enter the site.
40HA138	Civil War unfinished earthwork, roadbed, camp	Unknown. The history and archeology of the unfinished earthwork and the second, associated earthwork have not been documented. Likewise, it is unclear if the possible rifle trench was ever occupied. Possible functional relation to gap is undemonstrated.	Low. Until the site is better understood, it offers limited potential for public interpretation. Interpretive potential may increase with archeological investigations.
40HA139	Early-Late Archaic, stratified to 75 centimeters below surface. Not delineated.	High to very high. Stacked Early through Late Archaic deposits, 0-75 cm below surface.	High. The location provides an excellent vantage point from which to discuss the Holocene changes in Moccasin Bend.
40HA140	Late Archaic, Early-Middle Woodland. Dense midden and features.	High to very high. Potential for stacked components. Midden, features, and a house floor present.	Locational.

40HA141	Middle Woodland through Mississippian. Not professionally tested.	Unknown. No subsurface investigations have been conducted. Setting suggests potential for stratified deposits.	Low. Until the site is better understood, it offers limited potential for public interpretation. Interpretive potential may increase with archeological investigations.
40HA142	Middle-Late Woodland mound. Not fully delineated.	Very high. Moore's work and earlier looting have not impacted entire mound.	High. The mound remains as a recognizable surface feature. As well, the location is well suited to telling the history of Moore's work at Moccasin Bend. In present access conditions, interpretive potential is very low.
40HA143	Late Woodland mortuary mound. Not delineated.	Unknown. No artifacts have been recovered from limited professional investigations. If indeed a mortuary mound, the site has high to very high research potential, despite pre-Moore looting.	Moderate to High. If dating and function of mound were to be verified, the site (along with 40HA143) could be the focus of interpretation of the Woodland ceremonial use of Moccasin Bend. In present access conditions, interpretive potential is very low.
40HA144	Late Woodland mound, 19th century burials. Not fully delineated.	High for 19th century burials. Site could provide our only known sample of 19th century remains from Moccasin Bend. Unknown for Late Woodland. Moore did not dig below historic coffins, and there have been no subsequent investigations into the mound. If lower mound and sub-mound deposits from the Woodland are present, this site would have high research potential.	High, if Woodland function can be verified, and if historic use can be clarified. In present access conditions, interpretive potential is very low.
40HA145	Probable Late Woodland mound. Surface indications gone, no subsurface investigations since Moore.	Low. It is suspected that the mound and sub-mound deposits were destroyed in the 1930s.	Low. No surface feature remains. In present access conditions, interpretive potential is very low.

40HA146	Late Archaic through Late Mississippian, contact period, Civil War. Heavily looted.	Very high. Thick Woodland midden and house remains. Burnt houses, posts, palisade line, burials from the Late Mississippian. Evidence of Spanish contact.	Moderate to high.
40HA147	Early-Middle Archaic, Early-Late Woodland. Not fully delineated. Deposits up to 2.5 meters below surface.	High to Very High, but poorly documented. Suggestion of stacked Archaic and Woodland components, up to 2.5 meters below surface.	
40HA394	Civil War camp, roadbeds	High to very high. Camp features present. Camp occupants identified. 96th Illinois, 34th Illinois, and 18th Ohio Battery were present.	Moderate to high. Camp features present. War-era roadbeds present for reuse as trails. The interpretive trail proposed by White Star passes through northern one-half of the site.
40HA395	Civil War camp, roadbeds, house site	High to very high. Camp features present. Camp occupants identified. 96th Illinois Volunteers, 84th Indiana, and 40th Ohio, 10th Indiana Battery, and 18th Ohio Battery were present. For mid-19th century house site, potential unknown.	High. Many camp features present. This series of camps is not included on the interpretive trail proposed by White Star.
40HA440	Middle Woodland, Mississippian, Civil War. Cultural deposits to at least 1.5 meters below surface. Not fully delineated.	High to Very High, but poorly documented. Suggestion of stacked Woodland and Mississippian components. Shell-filled pits present, and displaced human bone.	Locational. Because erosion is actively exposing archeological deposits, it may be prudent to limit public access to this site.
40HA517	Middle-Late Woodland, possibly Mississippian, not fully delineated.	Unknown. Site is known only from tree-fall examinations.	Very low. The site currently cannot be data, and offers no surface features.
40HA521	Late Archaic, Early-Middle Woodland, Mississippian. Not fully delineated.	Unknown. The surface collection and 10 geoprobes were insufficient to characterize the potential of this site.	Locational. Because erosion is actively exposing archeological deposits, it may be prudent to limit public access to this site.

40HA522	Lithic artifacts. Not fully delineated.	Low, if characterization based on very limited fieldwork is correct. AOA argues site is more properly considered an isolated find.	Very Low. Sparse remains cannot be dated.
40HA523	Mississippian. Not fully delineated.	Unknown. Very little work has been conducted on the site. Suspected rock shelters, if present, could have high research potential.	Unknown.
40HA531	Antebellum and Civil War road system	Moderate to low. May yield a sample of military and domestic/commerce artifacts.	Undetermined. Portions of 40HA531 may be suited for adaptive reuse as walking trails related to the interpretation of antebellum, Civil War, and post bellum history of Moccasin Bend. Site is outside Civil War Site Study Area examined by White Star.
40HA532	Federal Road to Brown's Ferry. Cherokee, Civil War. Not fully delineated.	Moderate. Can provide details of road technologies in 19th century. Can provide a sample of Cherokee and Civil War artifacts.	Very high. The Federal Road course is a natural pathway to access Brown's Ferry. The road was vital to the history of Moccasin Bend. The road is recognizable in many places. Excavations could provide data for trailside interpretations. Key resource to including Trail of Tears in interpretive experience. Site is outside Civil War Site Study Area examined by White Star.

LIMITATIONS

Lack of deep testing in many areas. Potential does not equal certainty, and it presently unclear the horizontal and vertical extent of prehistoric components in areas with the potential for alluvial deposition and cultural stratigraphy. The most comprehensive work to date, that of the Chattanooga Regional Anthropological Association, is alternately described as “an informal intensive archeological survey” or “intensive testing.” In reality, a limited number of backhoe trenches comprised the survey (Alexander et al. 2010:84-91).

Lack of controlled metal detector survey in suspected camps. Except for limited metal detector survey in conjunction with the investigations by SEAC (Kidd 2007, 2009), there has not been any professional metal detecting of the various known and suspected camps. Inferences have been made on the regiments present in different camps, but there has been no archeological verification.

Lack of subsurface testing to verify boundaries. Site boundaries have commonly been determined by limited or no subsurface testing. As discussed above, this call into question the arbitrary spatial divisions designated as sites, and may hinder the proper management and interpretation of sites.

Undetermined potential for additional Spanish materials at 40HA146. The timing and nature of the Spanish interaction at sites 40HA146 is a major research issue, but current interpretations are based on probably incomplete (although extensive) interviews with looters and very limited unit excavation by the Chattanooga Regional Anthropological Association. It is unclear what percentage of the former looters was interviewed, or whether all those interviewed were honest or accurate regarding the discovery of Spanish artifacts. It is also not certain that the looters were successful in identifying and excavating the site areas with the highest frequency of Spanish goods. The Spanish goods recovered so far are from apparent burial contexts, but at other contact sites, Spanish items may also be plentiful in high-status residences. Accordingly, inferences drawn from burial-focused looting may be downplaying the true extent of Spanish interaction.

Civil War Focus Only on Stringers Ridge. The White Star study examined the Civil War resources in the Fort Whitaker vicinity through a combination of archival and cartographic research and field mapping of surface features. They report (White Star 2006:69):

The Civil War resources on Moccasin Bend are located at the southern extremity of Stringers Ridge, on the eastern portion of Moccasin Bend. The resources are located on a series of knolls, principally on the southern 1,000 yards of Stringers Ridge.

Despite the clarity and definitiveness of their statement, their study should not be considered to have identified all Civil War sites in the entire unit. White Star sought Civil War resources only in the Fort Whitaker/Stringers Ridge area. A review of the era maps provided by the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” and the White Star study suggest that Civil War resources were formerly present at the following locations:

- A two-gun battery of the 18th Ohio artillery east-southeast of the landing for Brown’s Ferry.
- An infantry trench occupied by the 115th Illinois, immediately north of the Federal Road and overlooking the landing at Brown’s Ferry. A camp may also be associated.
- A three-gun battery on the western shore of Moccasin Bend, approximately 1.0 km (0.6 mile) south of Brown’s Ferry. The terrace landform remains intact in this location, within the Moccasin Bend golf course. A small camp should also be associated.

In addition, it does not seem likely that the units working on the corduroying of the road and the construction of the pontoon bridge were all camping in the Fort Whitaker area, far removed from their work locations. For example, the 22nd Michigan Infantry worked on creating the corduroy road from October 29 through November 21, 1863 (Everts and Abbott 1880). The camp for this regiment has not yet been located.

Lack of concern with post-war resources. A number of farms were present on Moccasin Bend in the late nineteenth and early twentieth centuries. There are well known examples of farm sites (e.g., the ruins in the transmission line corridor of the Rock-Tenn parcel) that were not recorded in the archeological overview and assessment.

In addition, the Moccasin Bend Speedway held stock car races in the 1954, 1955, and 1956 seasons. This track was, at the time, the highest-banked, dirt track in the South. Despite having left a clear and substantial signature on the landscape, the track has not been recorded as an archeological site. The resource is more than 50 years old and has left clear landscape features and artifacts; it should be treated as an archeological resource.

AREAS OF ADDITIONAL ARCHEOLOGICAL POTENTIAL

Although there has been much archeological research in the park unit, there has not been a comprehensive survey of the entire unit. Previous studies, park personnel, and the current authors have identified several areas with high research potential.

Stratified Deposits of the Archaic and Paleo-Indian Periods

Relict Back Channel

The relict back channel, possibly a former channel of the river proper, has slowly filled during late prehistoric and historic occupations on the Bend. The channel may contain stratified deposits with significant climatic/environmental data from the span of human occupation of Moccasin Bend. As well, the back channel may have been the source for clays used by Woodland and Mississippian potters.

ISSUES

Lack of policy on contemporary Indian use of park for ceremonial activities. The presence of a rich archeological record, including contact period villages, may make the park attractive to contemporary Indians wishing to connect with this significant landscape. However, the interpretive values of the unit may be compromised if generic pan-Indian ceremonial activities are permitted. The unit should complete an Ethnographic Overview and Assessment, and then should develop a policy on ceremonial or ritual use of the unit in consultation with federally recognized tribes.

Lack of policy on burial or reburial of Indian skeletal material on park. Related to the point above, the unit should develop a policy on the burial of Indian remains, including material from the unit property and from elsewhere. This issue should be discussed with Indian stake-holders during the completion of the Ethnographic Overview and Assessment.

Lack of Policy on Archeological Research Outside Section 106/110. The unit will need to balance the fact that its sites are essentially non-threatened against the possible desire to learn more about past human use of Moccasin Bend through archeological research. The issue of “pure research” should be discussed with stake-holders during the completion of the Ethnographic Overview and Assessment.

Lack of Policy on Re-enactments. The unit should have a policy on the Civil War re-enactments. Such events can have positive public outreach value, but can also result in the deposit of artifacts that can intermingle with archeological remains. As the unit is developed, they may receive requests to hold re-enactments (e.g., batteries “firing” on Lookout Mountain).

Lack of strategy to recover materials removed from site. Although there apparently have been some unofficial contacts made with former looters of the unit, there is no official policy to encourage the return of materials taken from the property. Many of the looters are late in life, and there is a real risk that their collections, notes, and memories will be lost with their death. The park should be proactive in trying to repatriate artifacts to the unit.

Completeness of 110/106 compliance. Despite the thoroughness of the “Moccasin Bend National Archeological District: Archeological Overview and Assessment,” the results synthesized often did not come from thorough, professional, inventory efforts as required under Sections 106 and 110 of the National Historic Preservation Act. Site boundaries have commonly been subjectively defined by earlier researchers, and for most sites we lack any detailed understanding of the vertical and horizontal extent of the deposits. The National Park Service is cautioned against treating the archeological overview and assessment as their document demonstrating Section 110 compliance. There is little to ensure that there are not unrecorded, NRHP-eligible sites beyond the existing examples, or that there are not previously unrecognized components within existing sites.

The archeological overview and assessment can be used for generalized, early decision-making to avoid known sites of high research potential. As an extreme example, an alternative to place a visitors center atop a site would be dismissed almost immediately. However, the archeological overview and assessment should not be considered to reflect that it is safe to put a visitors center any place lacking a previously recorded site. Again, this is not offered as a criticism of the “Moccasin Bend National Archeological District: Archeological Overview and Assessment” and its authors.

Landscape Management of Civil War Earthworks and Woodland Mounds. The White Star study mentioned that the *Guide to Sustainable Earthworks Management* was being completed at the time of their original study. The Guide has been completed, and an expanded version is available online as *Cultural Landscape Currents* No. 5. This document and the earlier *Earthworks Landscape Management Manual* (Andropogon Associates 1989) should be consulted in creating plans for both the Civil War earthworks and the Woodland mounds.

Reconsideration of Need for Phase III Excavations of the Destroyed Lunette at the 10th Indiana Battery on the Eastern Knoll. White Star recommended extensive excavation of the former lunette to recover data on the structure of this position. Extensive hand excavation would be both time- and cost-expensive, and would cause further damage to the landscape. Geophysical prospection through intensive survey with a ground-penetrating radar unit makes more sense for documenting the former structure of the lunette. The area is currently grassed, with no trees. These conditions would be ideal for a GPR survey. The fieldwork for such a survey could be completed in two days by two people, and the resultant data on the subsurface features would allow a detail reconstruction of the lunette’s position, form, and construction method. A GPR survey would be non-intrusive, and would not damage the landscape. A GPR survey would not create artifacts for analysis and curatorial uses. If, as White Star argued, the key research issue at this former lunette is to determine its structure, GPR is a more appropriate approach than extensive hand excavation.

REFERENCES CITED

Alexander, L.S.

1993 “The Chattanooga Campaign: A Civil War History and Archeological Inventory of Moccasin Bend, Stringers Ridge in North Chattanooga, Lookout Valley, Brown’s Ferry, Williams Island and the Tennessee River Gorge.” Revised in 1995 and 1997. Prepared by Alexander Archeological Consultants for the Chattanooga Regional Anthropological Association, Lookout Mountain, Tennessee, and the Tennessee Historical Commission, Nashville, Tennessee.

Alexander, L.S., and R.B. Council

1994 “An Archeological Survey of the Proposed Outdoor Drama Amphitheater Site, Moccasin Bend, Chattanooga, Tennessee.” Jeffrey L. Brown Institute of Archeology, University of Tennessee, Chattanooga.

Alexander, Lawrence S., Julie J. Coco, Nicholas Honerkamp, R. Bruce Council, and Harry M. Hays

2010 “Moccasin Bend National Archeological District: Archeological Overview and Assessment.” Alexander Archeological Consultants, Wildwood, Georgia.

Coughlin, S., B.M. Carier Jones, M. Handly, and W.P. Athens.

2006 “Phase I Cultural Resources Survey and Archeological Inventory of Approximately 9.6 KM (6 MI) Long Section of Tennessee River Shoreline, Moccasin Bend Stream Bank Stabilization Project, Near Chattanooga, Hamilton County, Tennessee.” Report submitted to David Miller and Associates, Inc, Vienna, Virginia.

Evans E.R.

2002 “Looted Material From Moccasin Bend, The Hampton site (40HA146) Hamilton County, Tennessee.” Report submitted to Alexander Archeological Consultants, Inc. Chattanooga, Tennessee.

Evans, R. R. And J.L. Brown

1975 “Test Excavations on Genoco Oil Company Property on Moccasin Bend.” Jeffrey L. Brown Institute of Archeology, University of Tennessee, Chattanooga.

Evans, E.R. and V. Karhu-Welz

1982 “Background Data Concerning Cultural Resources On Moccasin Bend, Hamilton County, Tennessee.” Report prepared for the Chattanooga Regional Anthropological Association, Chattanooga.

Everts and Abbott

1880 *History of Livingston County, Michigan, with Illustrations and Biographical Sketches of Its Prominent Men and Pioneers.* J.B. Lippincott and Company, Philadelphia.

Graham, J.B.

1964 "The Archeological Investigation of Moccasin Bend (40HA63), Hamilton County, Tennessee." Report submitted to Tennessee Department of Highways. Manuscript on file, Department of Anthropology, University of Tennessee, Knoxville.

Kidd, R. Steven

2006 "Trip Report on Archeological Survey of Possible Visitor's Center Locations at Moccasin Bend National Historic Landmark (MOBE): September 11-22, 2006." Southeast Archeological center, National Park Service, Tallahassee, Florida,

2009 "Trip Report on Archeological Survey of Possible Visitor's Center Locations at Chickamauga and Chattanooga National Military Park (CHCH), Moccasin Bend National Historic Landmark (MOBE), April 9-25, 2007." Southeast Archeological center, National Park Service, Tallahassee, Florida,

McCollough, M.C.R. and Q.R. Bass III

1983a "Moccasin Bend: Chattanooga's First National Historic Landmark, Investigation of the Value of Its Archeological and Historical Contents as a Public Resource. Revised and printed in 1986." Chattanooga Regional Anthropological Association, Lookout Mountain, Tennessee.

1983b "Moccasin Bend, The Pride of Chattanooga Investigation of the Value of its Archeological and Historical Contents as a Public Resource Preliminary Investigations, Seasons 1-3." Chattanooga Regional Anthropological Association, Lookout Mountain, Tennessee. Report on file at the Jeffrey L. Brown Institute of Archeology, University of Tennessee, Chattanooga.

1983c "Moccasin Bend: The Unknown National Treasure of Chattanooga. Investigation of the Value of Its Archeological and Historical Contents as a Public Resource. Preliminary Investigations, Seasons 1-3." Chattanooga Regional Anthropological Association, Lookout Mountain, Tennessee. Report on file at the Jeffrey L. Brown Institute of Archeology, University of Tennessee, Chattanooga.

1984 "Investigations in the Center of Hampton Place at Chattanooga." Report submitted to the Electric Power Board of Chattanooga. Report on file at the Tennessee Division of Archeology, Nashville.

McCollough, M.C.R., R.S. Dickens, Jr., G. Dean, and D.S. Brose

1985 "Moccasin Bend National Land Mark Nomination and Documentation. Society of

American Archeology National Historic Landmark Committee, Washington, D.C.” Report on file at the Jeffrey L. Brown Institute of Archeology, University of Tennessee, Chattanooga.

Moore, C. B.

1915 *Aboriginal Sites on the Tennessee River. Journal of the Academy of Natural Sciences of Philadelphia* 16(2):169-428. Edited by Richard R. Polhemus. Reprinted 2002. The University of Alabama Press, Tuscaloosa, Alabama.

Spry, M.J. and J.M. Hollis

1997 “Cultural Resources Inventory of the TVA Shoreline Initiative Properties on Pickwick, Wheeler, Guntersville, and Nickajack Reservoirs in Mississippi, Alabama, and Tennessee.” Office of Archeological Services, The University of Alabama, Moundville. Report submitted to the Tennessee Valley Authority, Norris, Tennessee.

White Star Consulting

1998 “Preservation and Interpretation Plan For Civil War Resources Located At Moccasin Bend National Historic Landmark, Chattanooga, Tennessee. White Star Consulting, MountPleasant, Tennessee.” Prepared though funding provided by the American Battlefield Protection Program. Report submitted to the Friends of Moccasin Bend, Chattanooga, Tennessee.

Resource Category & Name	Date of Construction	Condition	Contribution	Period of Significance	Treatment
GENERAL					
<i>Natural Systems & Features</i>					
Physiography, Geology & Soils	N/A	Good	Contributing	PIP, ARC, WDL, MIS, AMI, CHE, CWP	Preserve
Topography and Hydrology	N/A	Good	Contributing	PIP, ARC, WDL, MIS, AMI, CHE, CWP	Preserve
Vegetation	N/A	Good	Contributing		Preserve
<i>Cultural Features</i>					
Land Use	N/A		Non-Contributing		Acquire
Circulation					
Contemporary Roads	post 1865	Good	Non-Contributing		Maintain
Blue Blazes Trail	1989	Good	Non-Contributing		Remove
Views & Vistas					
Lookout Mountain to Moccasin Bend	N/A	Good	Contributing	CWP	Preserve
COMPONENT LANDSCAPES					
<i>Archeological Sites</i>					
Hampton Place					
Above Ground Features	post 1865	Good	Non-Contributing		Preserve (selective removal)
Archeological Resources (below ground)	Late ARC - AMI Period	Unknown	Contributing	ARC, WDL, MIS, AMI	Preserve
Vulcan Site					
Above Ground Features	post 1865	Good	Non-Contributing		Preserve (selective removal)
Archeological Resources (below ground)	Late ARC - AMI Period	Unknown	Contributing	ARC, WDL, MIS, AMI	Preserve
Mallards Dozen					
Above Ground Features	post 1865	Good	Non-Contributing		Preserve (selective removal)
Archeological Resources (below ground)	Early ARC - WDL Period	Unknown	Contributing	ARC, WDL, MIS	Preserve
Woodland Mound Complex					
Above Ground Features	post 1865	Good			Preserve
Archeological Resources (below ground)	WDL Period	Fair to Unknown	Contributing	WDL, CWP	Preserve
<i>Brown's Ferry and Homestead</i>					
Homestead	1820s	Fair	Contributing	CHE	Locate
Ferry Crossing Site	1820s	Fair	Contributing	CHE, CWP	Preserve/Interpret
View across Tennessee River	N/A	Fair	Contributing	CHE, CWP	Preserve
<i>Stringers Ridge Civil War Sites</i>					
Road System	1863	Good	Contributing	CWP	Preserve
Vegetation	N/A	Good	Contributing	CWP	Preserve (selective removal)
Views	N/A	Fair	Contributing	CWP	Partial Restoration
Earthworks	1863	Good	Contributing	CWP	Preserve
OTHER MOCASSIN BEND PROPERTIES					
Moccasin Bend Mental Health Institute	1961	Good	Non-Contributing		Acquire/CMA
Moccasin Bend Golf Course	1965	Good	Non-Contributing		Acquire/CMA
Old Federal Road Tract	CHE Period	Poor	Contributing	CHE	Locate
Other Properties	post 1865	Good	Non-Contributing		Acquire/CMA

CMA = Cooperative Management Agreement

Periods of Significance

(PIP) Paleo-Indian Period 10500 -- 8000 BC

(ARC) Archaic 8000 -- 700 BC

(WDL) Woodland 700 BC -- AD 1000

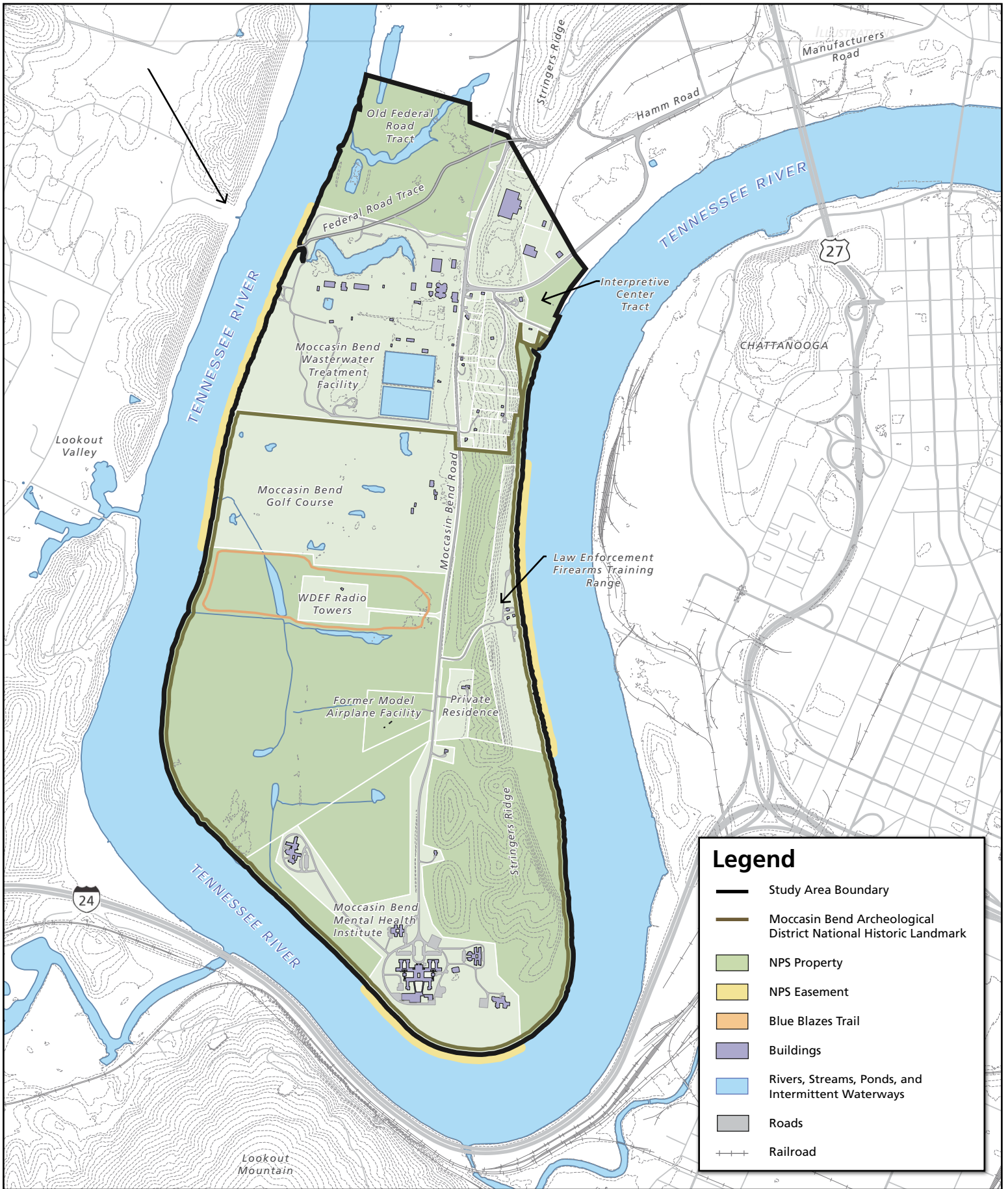
(MIS) Missippian Period AD 1000 -- 1630

(AMI) American Indian and European Contact Period 1513-1760

(CHE) Cherokee Settlement, American Colonial Settlement, and American Indian Forced Removal Period (1760–1860)

(CWP) Civil War Period 1861 -- 1865

APPENDIX B: ILLUSTRATIONS



Legend

- Study Area Boundary
- Moccasin Bend Archeological District National Historic Landmark
- NPS Property
- NPS Easement
- Blue Blazes Trail
- Buildings
- Rivers, Streams, Ponds, and Intermittent Waterways
- Roads
- Railroad

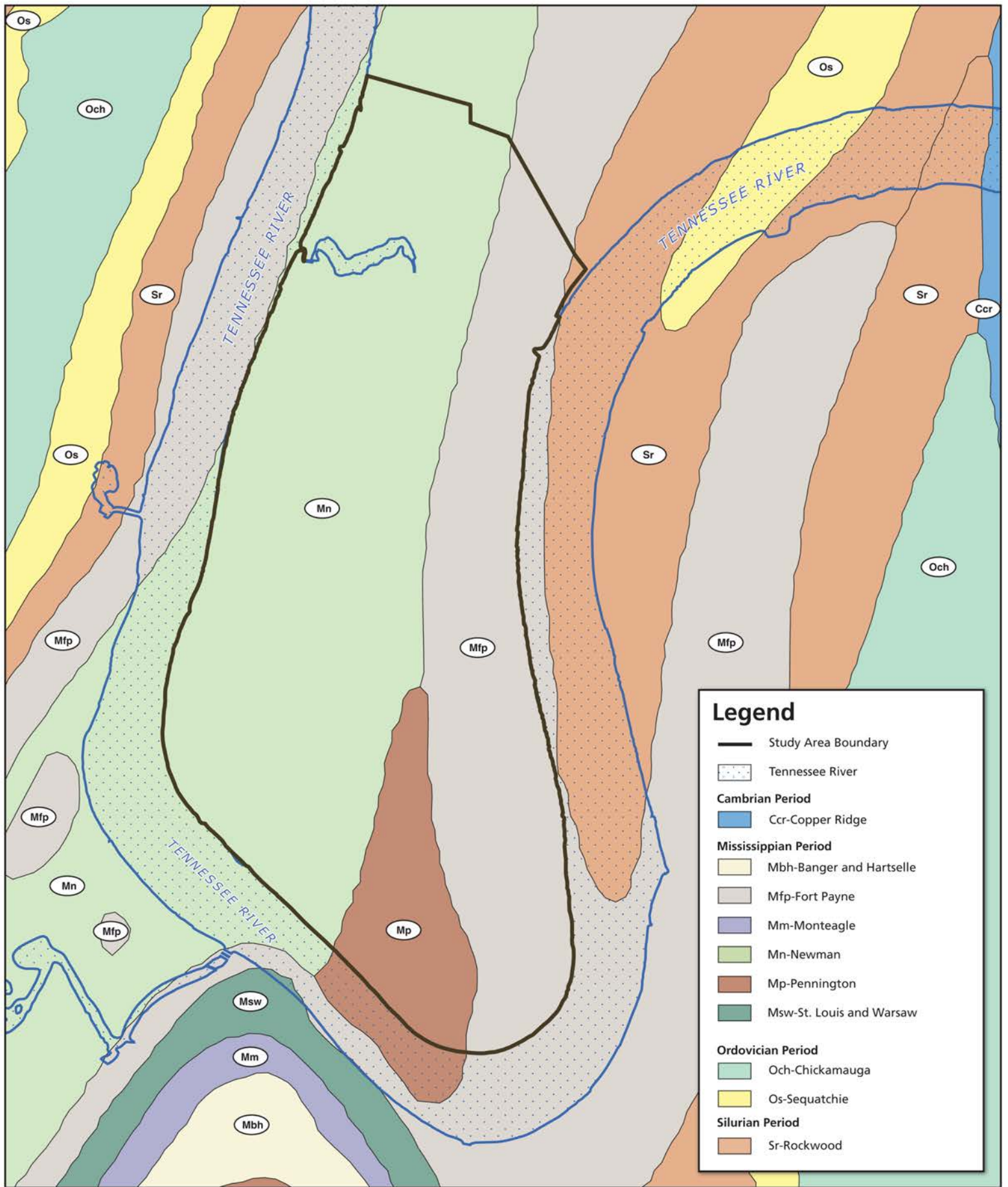
SITE MAP • ILLUSTRATION 1.1

Moccasin Bend National Archeological District

National Park Service • U.S. Department of the Interior

February 2014





GEOLOGY • ILLUSTRATION 3.1

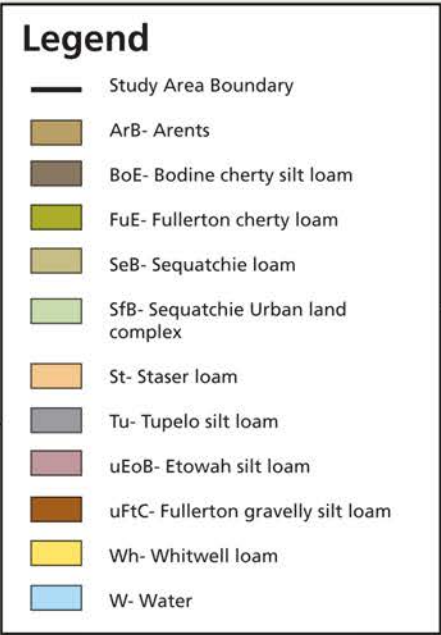
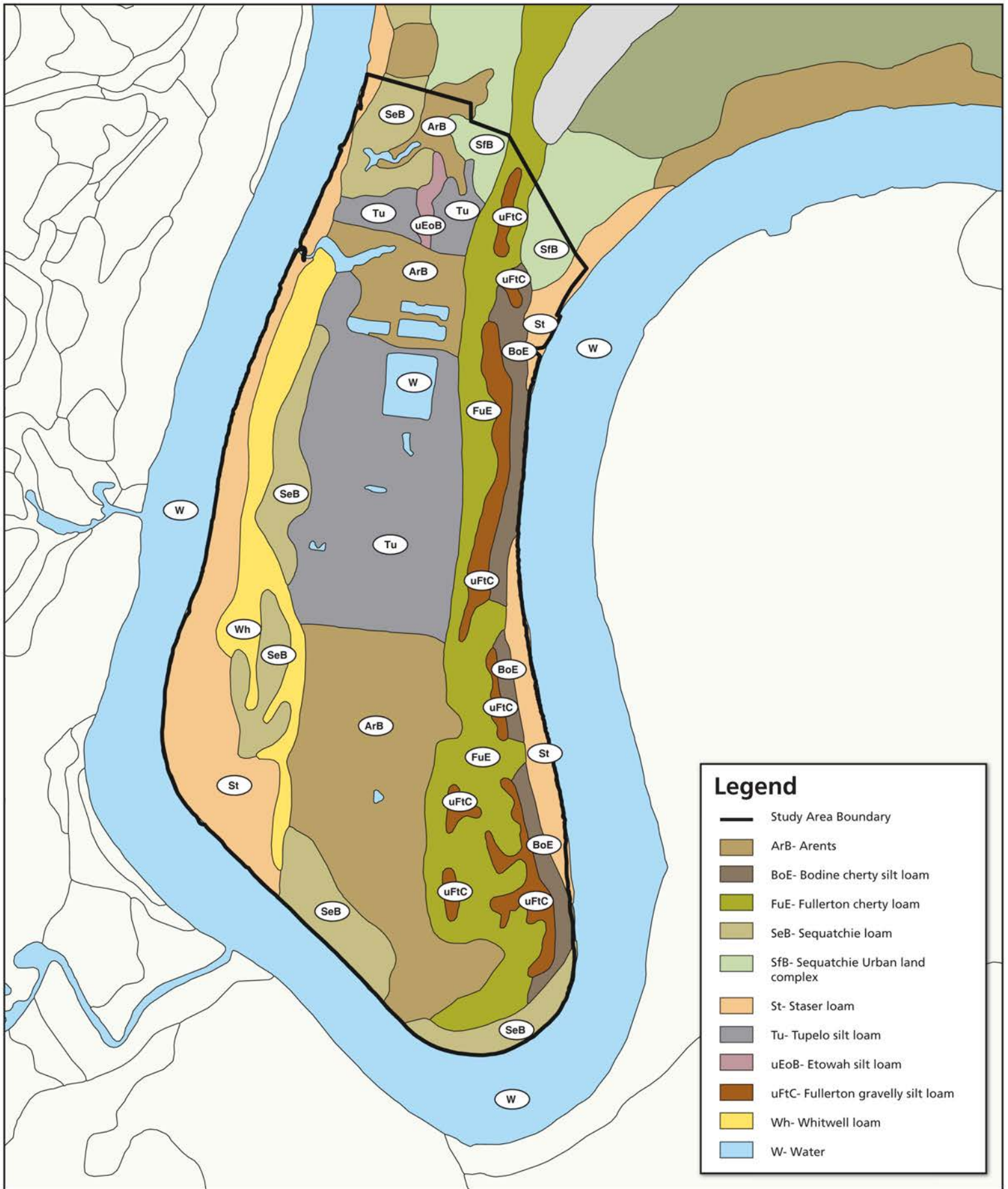
Moccasin Bend National Archeological District

National Park Service • U.S. Department of the Interior

May 2013

North





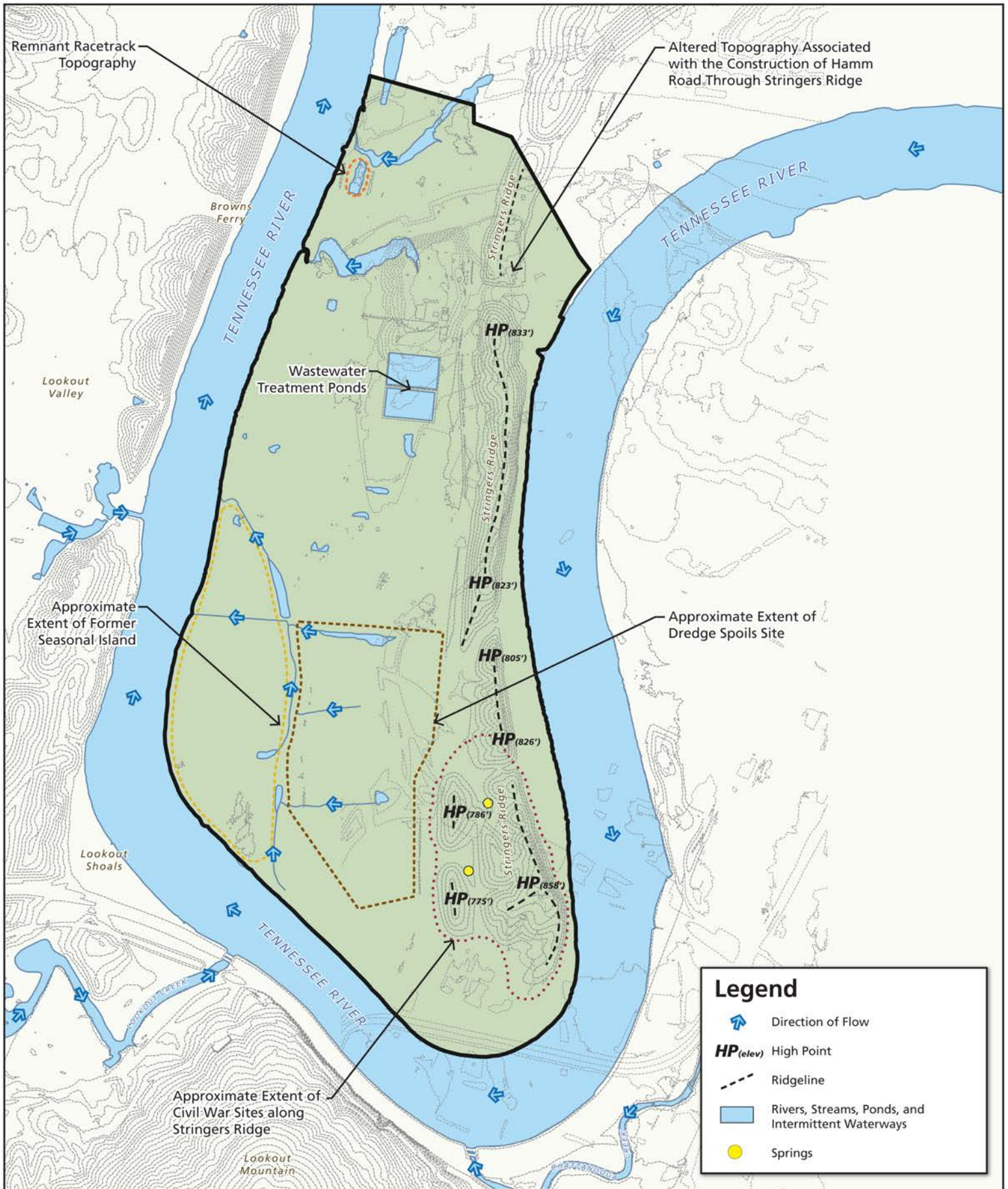
SOILS • ILLUSTRATION 3.2

Moccasin Bend National Archeological District

National Park Service • U.S. Department of the Interior

May 2013





HYDROLOGY AND TOPOGRAPHY • ILLUSTRATION 3.3

Moccasin Bend National Archeological District

National Park Service • U.S. Department of the Interior

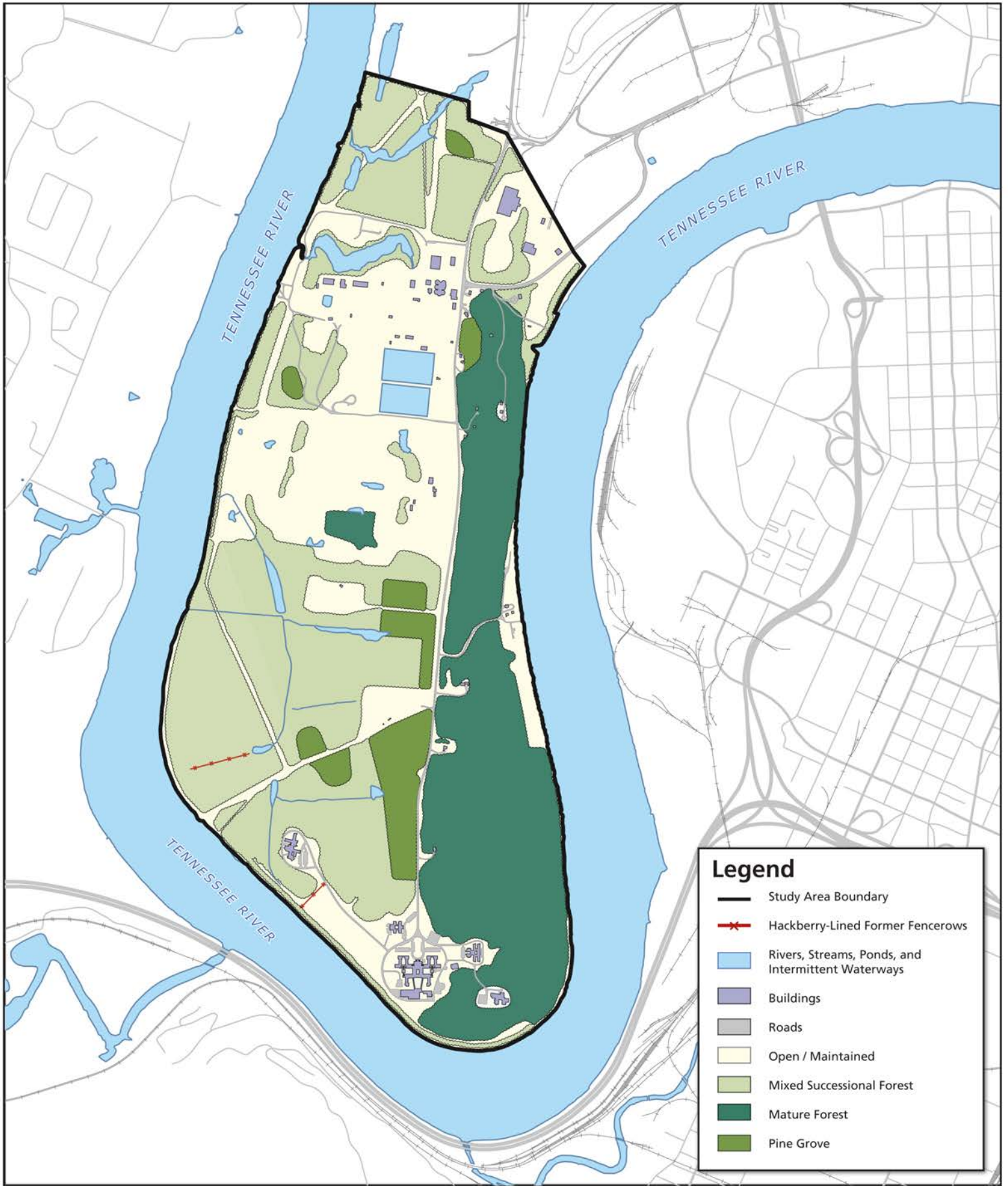
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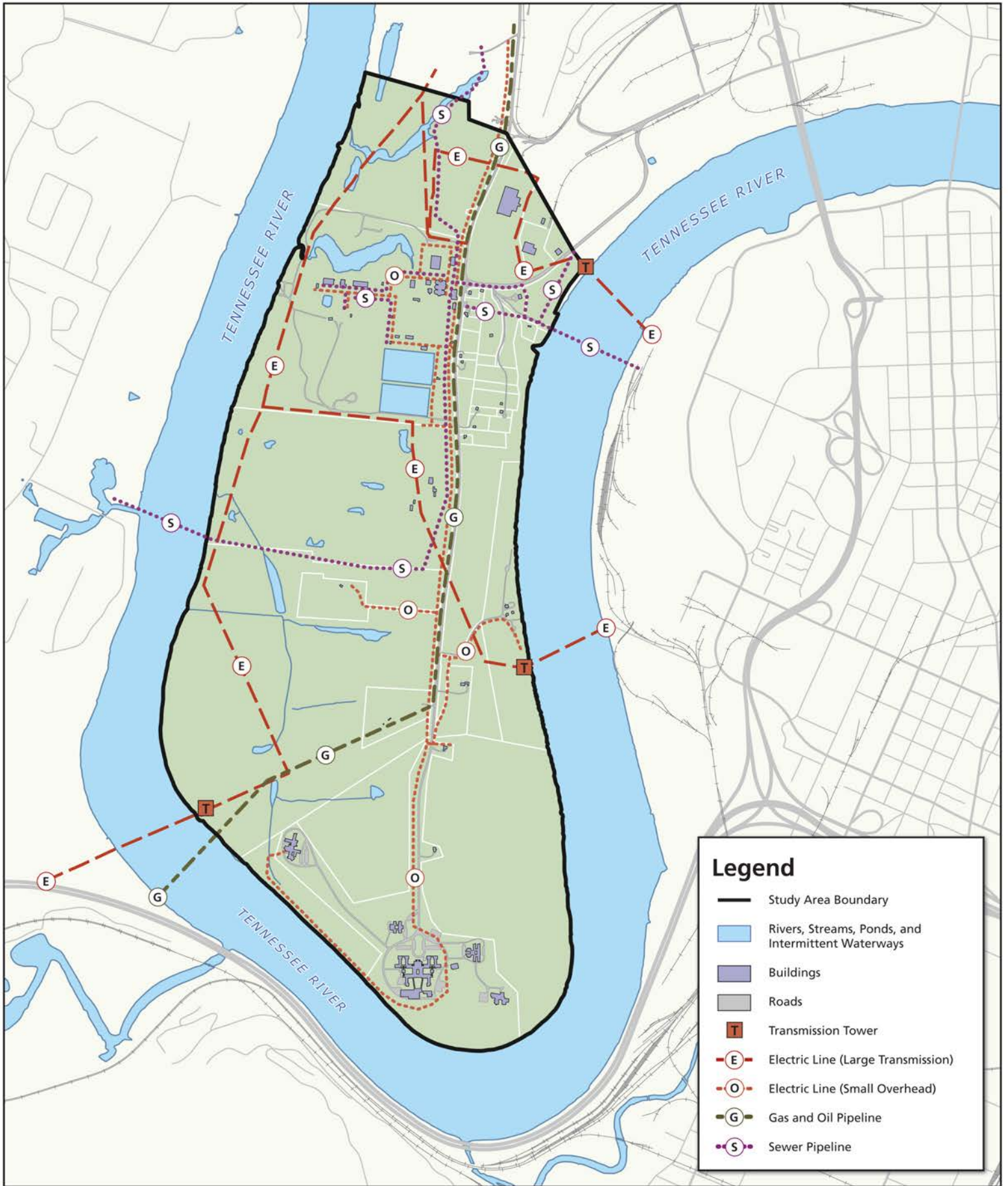


Legend

- Study Area Boundary
- Hackberry-Lined Former Fencerows
- Rivers, Streams, Ponds, and Intermittent Waterways
- Buildings
- Roads
- Open / Maintained
- Mixed Successional Forest
- Mature Forest
- Pine Grove

VEGETATION • ILLUSTRATION 3.4
Moccasin Bend National Archeological District
 National Park Service • U.S. Department of the Interior
 May 2013





Legend

- Study Area Boundary
- Rivers, Streams, Ponds, and Intermittent Waterways
- Buildings
- Roads
- Transmission Tower
- Electric Line (Large Transmission)
- Electric Line (Small Overhead)
- Gas and Oil Pipeline
- Sewer Pipeline

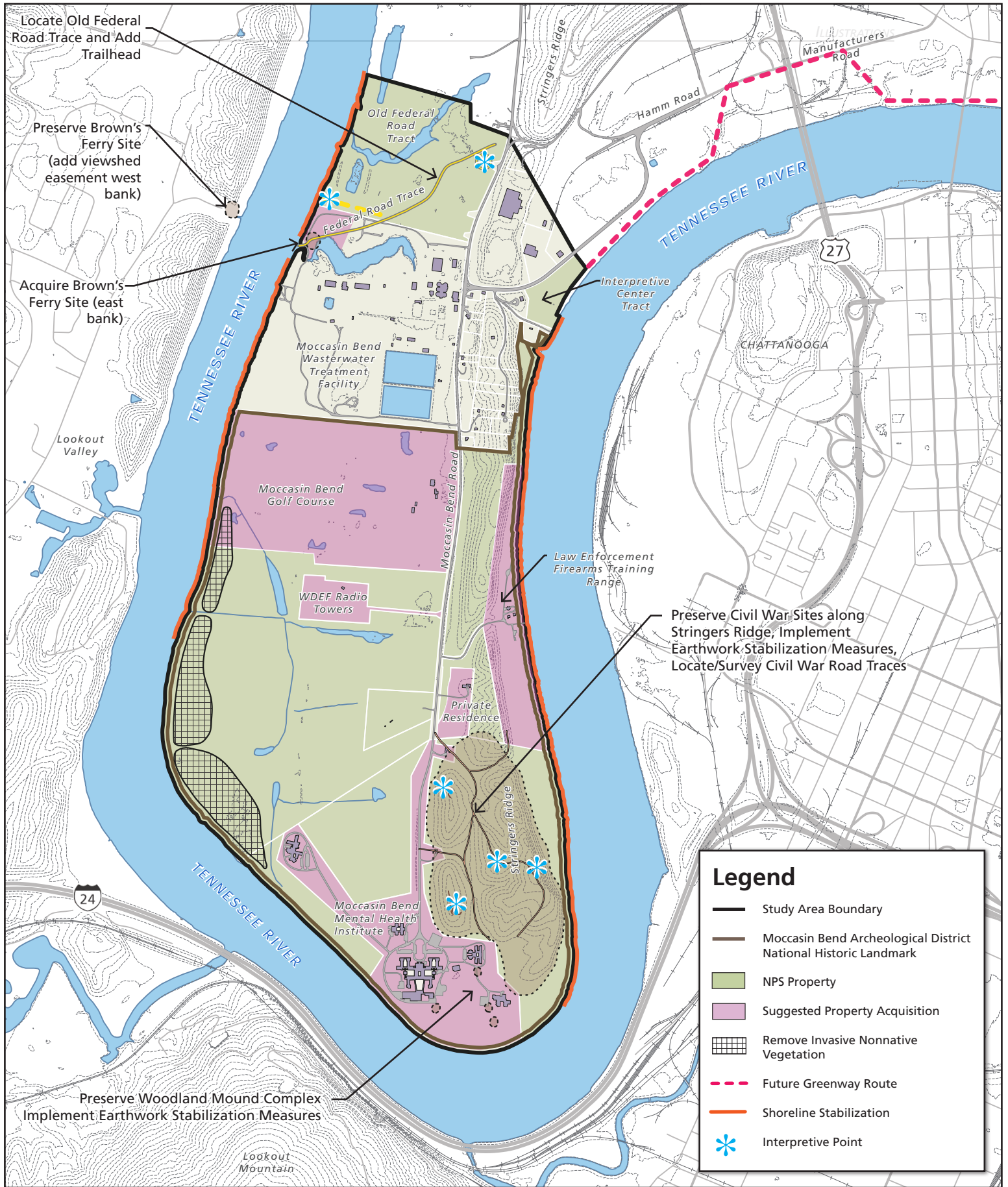
UTILITIES • ILLUSTRATION 3.5

Moccasin Bend National Archeological District

National Park Service • U.S. Department of the Interior

May 2013





TREATMENT RECOMMENDATIONS • ILLUSTRATION 5.1

Moccasin Bend National Archeological District





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

MOBE P50 124860
April 2014

National Park Service
U.S. Department of the Interior

Chickamauga and Chattanooga National Military Park
3370 LaFayette Road
Fort Oglethorpe, GA 30742

www.nps.gov/chch