Executive Summary

INTRODUCTION

In March 2019 Congress passed the John D. Dingell, Jr. Conservation, Management, and Recreation Act (Public Law 116-9). Title II, Subtitle B, section 2102 of this act authorized the Secretary of the Interior to conduct a special resource study of the Ocmulgee River corridor between the cities of Macon, Georgia, and Hawkinsville, Georgia. As directed by Congress, the National Park Service (NPS) has prepared this special resource study to evaluate the potential of the river corridor to be included within the national park system. The relevant text of Public Law 116-9 is included in appendix A.

RESOURCE OVERVIEW

The Ocmulgee River corridor study area is located between Macon and Hawkinsville, Georgia, and comprises a distance of about 50 river miles and approximately 120,000 river-adjacent acres. The study area contains a mix of publicly and privately owned, mostly undeveloped bottomland forest and wetlands and upland forests. The study area provides exceptional cultural resources that display (1) the area’s role in developing the discipline of archeology through the New Deal federal work relief programs of the 1930s–1940s; (2) the area’s continuing cultural importance to descendants of Creek people, who recognize the Ocmulgee River corridor as their traditional homeland; and (3) the area’s precontact and ancestral Creek archeological sites, many of which were investigated during New Deal archeological projects, including the Mississippian period mounds at Ocmulgee Mounds National Historical Park. A diversity of vegetation communities exists in the area, including upland mixed hardwood-pine, bottomland hardwoods, tupelo gum swamp forests, creeks, tributaries, beaver swamps, and upland lakes, and the study area serves as an important wildlife corridor. Land use in the general area surrounding the study area is a mixture of commercial, industrial, residential, and agricultural uses.

SUMMARY OF FINDINGS

Based on the analysis performed through this special resource study, the National Park Service concludes that the Ocmulgee River corridor study area does not meet all of the established criteria for new national park system units.
National Significance—The Ocmulgee River corridor study area possesses natural and cultural resources that are nationally significant. The study area meets this criterion for inclusion in the national park system.

Suitability—The Ocmulgee River corridor represents cultural and natural resources that are not already adequately represented in the national park system or protected for public enjoyment by another federal, state, local, nonprofit, or private entity. The study area meets this criterion for inclusion in the national park system.

Feasibility—The Ocmulgee River corridor includes a large number of private property parcels and public lands. Although some members of the public and Native American tribes support the creation of a national park and preserve with NPS management, many private landowners and public land managers do not. There are many challenges associated with potential acquisition of private property in the study area and there are existing and expanding threats to the resources of the study area (primarily in the form of development, agricultural and mining activities, and timbering—some of which have resulted in likely environmental liabilities). For these reasons and others, the study area does not meet the feasibility criterion for consideration as a unit of the national park system.

Need for Direct NPS Management—Because the study area did not meet the feasibility criteria, need for NPS management was not fully analyzed and management alternatives were not developed. Furthermore, management by the National Park Service does not appear to be the most efficient or necessary strategy for the river corridor. Major portions of the study area are already managed for public use and conservation by the US Fish and Wildlife Service and the Georgia Department of Natural Resources.

In addition, the National Park Service is already present on the north end of the river corridor at Ocmulgee Mounds National Historical Park. Opportunities currently exist for these agencies to cooperate with each other and with private landowners in the corridor to expand conservation and public enjoyment of the resources of the study area. Therefore, the study area does not appear to meet this criterion for inclusion in the national park system.

Other Options for Conservation—A suggested alternative for potential management of the Ocmulgee River corridor is through partnership-based conservation. The National Park Service, through Ocmulgee Mounds National Historical Park, could provide additional conservation and resource interpretation in a joint partnership approach in which the collective land managers, including the Muscogee (Creek) Nation, would have the same goals and each manage in an effective manner to meet a shared vision. A partnership approach would be cost effective and enable partners to leverage existing resources, providing a collective stewardship of the river corridor in a more sustainable way. An approach that leverages partnerships could also be employed to address the interest of some stakeholders to consider a reduced area within the larger study area as a way to provide additional partner support and resources to mitigate many of the concerns that led to a negative finding for the feasibility criterion in this study.

In addition to partnership management, pursuing National Heritage Area (NHA), National Historic Landmark (NHL), National Natural Landmark (NNL), and/or National Wild and Scenic River status would provide added recognition (and potentially support for conservation) of the area’s importance to the nation.
These programs can offer recognition, technical assistance, and grant opportunities for resources not owned by the National Park Service or directly managed as a unit of the national park system.

An NHA designation could be considered through a feasibility study, which could be a particularly useful tool in the conservation and management needs of the river corridor. National Heritage Areas can provide financial and technical assistance to public and private landowners, potentially incentivizing conservation efforts. If desired, the Muscogee (Creek) Nation (or other tribes) could serve as a coordinating entity for a National Heritage Area or as a member of its governing board. National Heritage Area feasibility studies apply a different set of criteria than a special resource study; conducting one would require additional analysis and public comment. However, reliance on information presented in this report could reduce the cost and time needed to complete such an evaluation.

CONCLUSION

The Ocmulgee River corridor study area meets established criteria for national significance and suitability but does not appear to be a feasible addition to the national park system as a stand-alone unit at present. Opportunities to protect and provide access to the significant resources of the corridor exist via partnerships among current land managers (including the National Park Service), and no demonstrated need exists for direct NPS management of the river corridor. Therefore, this special resource study finds that the Ocmulgee River corridor study area does not meet all of the criteria necessary to be considered eligible for designation as a new unit of the national park system.

A GUIDE TO THIS REPORT

This special resource study is organized into the following chapters. Each chapter is briefly described below.

Chapter 1: Study Purpose and Background provides a brief description of the study area and an overview of the study’s purpose, background, and process. This chapter also summarizes the NPS findings on the special resource study.

Chapter 2: Historical Background and Resource Description provides a historic overview and site description of the Ocmulgee River corridor.

Chapter 3: National Significance describes the evaluation criteria of the special resource study and the findings for the national significance criterion.

Chapter 4: Suitability describes the findings for the suitability criterion.

Chapter 5: Feasibility and Need for NPS Management describes the findings for the feasibility and need for direct NPS management criterion.

Chapter 6: Conservation Options presents a range of potential future opportunities for the preservation, protection, and interpretation of the study area. This analysis was conducted, in part, to explore considerations for NPS involvement.

Chapter 7: Conclusion presents summaries of the findings for each study criterion and the overall conclusions of the special resource study.
The appendixes include the legislation authorizing this special resource study, descriptions of the criteria evaluated in a special resource study, National Environmental Policy Act documentation, a civic engagement report that includes a summary of major input that was provided by the public during the initial phases of the study, a list of the study team members, and a bibliography.
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Chapter 1: Study Purpose and Background

BACKGROUND

New lands are typically added to the national park system by an Act of Congress. However, before Congress decides to create a new national park system unit, it needs to know whether the area and its resources meet established criteria for designation. The National Park Service (NPS) is often tasked with evaluating new areas for compliance with these criteria and documenting the agency’s findings in a special resource study.

In 2019, Congress directed the Secretary of the Interior to conduct a special resource study of the Ocmulgee River corridor between the cities of Macon, Georgia, and Hawkinsville, Georgia, to determine if the study area would be an appropriate addition to the national park system (appendix A). Also considered in the study were other alternatives for preservation, protection, and interpretation of the study area by federal, state, or local governmental entities or private or nonprofit organizations. The study area encompasses a patchwork of privately and publicly owned land, including the Bond Swamp National Wildlife Refuge and two State of Georgia wildlife management areas.

The study area also includes much of the Ocmulgee Old Fields Traditional Cultural Property not already included in Ocmulgee Mounds National Historical Park.

This special resource study evaluates the study area for potential inclusion in the national park system. The study is intended to provide Congress with information about the quality and condition of the study area and its relationship to established criteria for NPS park lands.

ORGANIZATION OF DOCUMENT

This study presents information on historical context and existing conditions in “Chapter 2: Historical Background and Resource Description.” Chapters 3, 4, and 5 analyze the national significance of the Ocmulgee River corridor, its suitability and feasibility for inclusion in the national park system, and its need for direct NPS management. The legislation that authorized the study directs the National Park Service to “consider other alternatives for preservation, protection, and interpretation of the study area by federal, state, or local governmental entities or private or nonprofit organizations or any other interested individuals.”
Chapter 6: Conservation Options” presents a range of potential future management opportunities, including direct NPS management. In addition to addressing the requirement in the legislation, these scenarios were developed to explore costs and other management considerations and to aid in the evaluation of the feasibility criterion. “Chapter 7: Public Outreach” describes the National Park Service’s efforts to involve the public, including local residents, and to collect public input during the study.

OVERVIEW OF STUDY AREA

The segment of the Ocmulgee River corridor analyzed by the study team is situated in central Georgia. The study legislation established the northern boundary as Macon, Georgia, and the southern boundary as Hawkinsville, Georgia. Between these two urban areas, the Ocmulgee River crosses five counties: Bibb, Houston, Twiggs, Bleckley, and Pulaski. According to the 2020 census, the population of Macon is 157,346, and the population of Hawkinsville is 5,376. Macon is the largest principal city of the Macon-Warner Robins-Fort Valley Combined Statistical Area that includes the Macon metropolitan area (Bibb, Crawford, Jones, Monroe, and Twiggs Counties) and the Warner Robins Metropolitan area (Houston, Peach, and Pulaski Counties), which had a combined population of 411,898 in the 2010 census. The Atlanta metropolitan area is located just to the north.

The study area is surrounded by mixed agricultural, residential, commercial, and industrial lands. US Interstate 16 and US Route 23 run on the east side of the study area, while US route 129 runs on the west side of the study area. Macon is one of Georgia’s three major Fall Line cities, along with Augusta and Columbus. The Fall Line is where the hilly lands of the Piedmont plateau meet the flat terrain of the coastal plain.

While the study area has no National Historic Landmarks or National Natural Landmarks, it does include properties that have federal protection and/or national recognition. To the immediate north of the study area is Ocmulgee Mounds National Historical Park, a unit of the National Park Service. The park is located on the Macon Plateau, a flattened hill once part of the ancient Ocmulgee River east terrace (Andrews, Collings, and Lee 2014) on the bank of the Ocmulgee River, east of downtown Macon in Bibb County. The historical park comprises archeological features on the Macon Plateau. The boundary of the historical park was expanded under the 2019 John D. Dingell, Jr. Conservation, Management, and Recreation Act (Public Law [PL] 116-9) to around 3,700 acres, most within the proposed Ocmulgee Old Fields Traditional Cultural Property (New South Associates 2020; Wheeler 2007). (Significant land acquisition has since occurred within the expanded boundary.) Portions of Bond Swamp National Wildlife Refuge, Echeconnee Creek Wildlife Management Area, Ocmulgee Wildlife Management Area and Public Fishing Area, and Oaky Woods Wildlife Management Area are also included in the study area (figure 1). Finally, ancestors of Native American communities once owned Bibb, Bleckley, Houston, Pulaski, and Twiggs Counties, particularly Creek communities and the Muscogee (Creek) Nation (Butler 2020).
Figure 1. The Ocmulgee River Corridor, General Study Area
The following methodology was used to determine if the Ocmulgee River corridor study area satisfies the special resource study requirements.

1. **Assess Public Opinion and Ideas about Managing the Site.** Early in the study process, the National Park Service conducted public outreach about the special resource study. The agency collected information on a variety of topics, including the level of public support for the inclusion of the Ocmulgee River corridor within the national park system and other (non-NPS) options for protecting the site’s resources and providing opportunities for visitors.

2. **Evaluate Study Area for Inclusion in the National Park System.** Per Public Law 91-383 section 8 as amended by section 303 of the National Parks Omnibus Management Act (Public Law 105-391) and NPS policy, properties must meet certain criteria to qualify as a new unit of the national park system (see appendix B). Potential new units must:
   - possess nationally significant natural and/or cultural resources;
   - be a suitable addition to the national park system;
   - be a feasible addition to the national park system; and
   - require direct management by the National Park Service that cannot or will not be accomplished by another governmental entity or by the private sector.

3. **Evaluate NPS Management Alternatives.** According to NPS policy and guidelines for special resource studies, if the resources meet the criteria for inclusion within the national park system and the need for direct NPS management is identified, then the study process continues with an analysis of management options available within the National Park Service. Legislation authorizing the Ocmulgee River Corridor Special Resource Study directed the National Park Service to identify alternatives for management, administration, and protection of the site.

4. **Transmit Study Report to Congress.** Following completion of this special resource study, the study report and summary findings will be transmitted by the National Park Service to the Secretary of the Interior. The Secretary of the Interior will then transmit the study and any recommendations to Congress.

**COMPLIANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT**

The National Parks Omnibus Management Act of 1998 requires each study to be “completed in compliance with the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) (54 USC 100507). This study complies with the National Environmental Policy Act (NEPA) of 1969, as amended, which mandates that all federal agencies analyze the impacts of major federal actions that have a significant effect on the environment.

A categorical exclusion was selected as the most appropriate NEPA pathway for this study.
The study is excluded from requiring an environmental assessment or environmental impact statement because there is no potential for impacts on the human environment under normal circumstances without further legislative action by Congress. The applicable categorical exclusion is in the category of “Adoption or approval of surveys, studies, reports, plans, and similar documents which will result in recommendations or proposed actions which would cause no or only minimal environmental impact” (NPS NEPA Handbook, 3.2 (R)).

OVERVIEW OF PUBLIC OUTREACH

The National Parks Omnibus Management Act of 1998 requires that each special resource study “shall be prepared with appropriate opportunity for public involvement, including at least one public meeting in the vicinity of the study, and after reasonable efforts to notify potential affected landowners and State and local governments.”

The National Park Service made a diligent effort to engage interested and affected individuals, groups, and agencies during the preparation of this study. In the initial steps of the process, the National Park Service conducted extensive research, including targeted stakeholder consultation, to document the environmental and cultural history of the study area. The environmental context and cultural and historic context documents were presented for public comment along with a list of topic questions to further inform the special resource study in early 2021. National Park Service personnel planned and conducted public outreach aimed at sharing information about the special resource study process and collecting information that would inform the findings of the study. The National Park Service solicited public input on a variety of topics, including current management of the study area and ideas for future resource protection and visitor enjoyment.

This outreach also helped the National Park Service assess the level of local support for adding the Ocmulgee River corridor to the national park system. Public outreach efforts conducted as part of this study are summarized in a civic engagement report presented in appendix C.

STUDY LIMITATIONS

Special resource studies serve as reference sources for members of Congress, the National Park Service, and other persons interested in the potential designation of an area as a new unit of the national park system. The reader should be aware that the analysis and findings contained in this report do not guarantee future funding, support, or any subsequent action by Congress, the Department of the Interior, or the National Park Service.
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Chapter 2: Historical Background and Resource Description

INTRODUCTION

This chapter provides the environmental and cultural historical contexts for identifying resources in the Ocmulgee River corridor and for assessing the significance of these resources as described in chapter 3 of this study.

CULTURAL AND HISTORICAL CONTEXT

This section presents a broad overview of the history and cultural resources within and near the 50-river-mile study area. This section additionally contains topics, themes, and resources identified in early consultation with representatives of Native American tribes, land managers, activists, scholars, landowners, and other stakeholders. In addition to information received during consultation, the study team identified cultural resources through a review of available scholarship and archeological data. Furthermore, this section was presented for public review and comment in spring of 2021, and additional sources and content were developed as guided by responses to those public comments (see “Appendix C: Civic Engagement Summary”).

The NPS study team did not conduct any original research relating to resources as part of this study. Rather, the study team analyzed available reports, oral histories, and other documentation and scholarship for this broad cultural and historic context.

This section briefly describes the major chronological periods along with some of these properties’ histories and is divided into 10 time periods:

History Before European Contact

- Paleoindian Period (10,000–8000 BCE)
- Archaic Period (8000–1000 BCE)
- Woodland Period (1000 BCE–1000 CE)
- Mississippian Period (1000–1540 CE)
History After European Contact

- European Exploration and Expansion (1500–1732 CE)
- Colonial and Revolutionary War Period (1733–1783)
- Early Republic and American Expansion Period (1783–1821)
- Native American Removal, Antebellum, Civil War, and Reconstruction Period (1821–1900)
- Growth and Depression Period (1900–1941)
- World War II to Present Period (1942–Present)

Ethnographic and Cultural Connections to the Study Area

The Ocmulgee River corridor has had about 17,000 years of continuous human habitation from the Paleoindian period to the modern day (NPS 2019; Day and Klingelhofer 2019; New South Associates 2018; Wheeler 2007). During the majority of this time, Native Americans moved through and lived in this landscape before contact with Europeans in the 16th century (Day and Klingelhofer 2019). Contact with Europeans drastically changed Native Americans’ way of life, but there was also continuity among the change. This contact additionally resulted in the creation of written records and descriptions of Native Americans from an outsider’s perspective. The authors of these documents, as outsiders with a different worldview, would not have truly understood Native American cultures, relationships, or worldview. The salient prejudices of these descriptions, however, still influence research and the way that precontact and postcontact Native Americans are described and interpreted (Wendt 2020; Dunbar-Ortiz 2015).

Precontact Native peoples did not leave behind written records; therefore, archeology, anthropology, ethnohistory, and other academic fields and scientific techniques are often used to understand their culture and way of life. These academic fields, however, can be limited based on preservation and methodology, technology, researcher cultural bias, and research focus. Historically, archeologists have referred to these precontact Native peoples and their associated sites by the names of the archeologically identified cultural or ceramic phases. But these archeologically derived names are arbitrary and likely bear little to no resemblance as to how Native peoples would have experienced or described their own cultures. Variation also exists among scholars in identifying beginning and ending dates for the major periods of cultural and historical development, and much of this variation occurs in the precontact periods.

Precontact Native Americans had other means by which they preserved their history, such as through storytelling, art, and tradition, and the ethnohistories and oral histories of descendant people capture some of these traditions that cannot be accessed through archeology. A key element of the Ocmulgee River corridor is the living connection between descendant populations of Native peoples and their ancestors. Postcontact “Creek Indians” is a term applied by English traders to an amalgamation of Native peoples (Countryman 2000) and other tribes with various languages, dialects, or tribal towns (etvlwv) (Lee 2014). Both the Creek Indians and their descendants maintained oral histories and traditions of their ancestors who lived in the Ocmulgee River corridor, specifically the Macon Plateau area, before European contact.

1. Pronounced DULL-wah (leading e is silent) (Deer and Knapp 2013).
Other oral history accounts link Creek peoples with the precontact peoples who built the Mississippian period mounds (Swanton 1922). The oral history accounts include a migration story in descendant Creek oral histories, such as told by Phillip Deere, a Muscogee (Creek) medicine man (Phillip Deere n.d.) and excerpts from oral histories by Brian OnTheHill in Lee (2014) linking Creek peoples to the Mississippian period peoples. Archeological evidence largely supports a connection between the Mississippian period mound-building people and the postcontact Creek peoples as well (Pauketat and Alt 2015).

Oral histories from Creek descendant peoples indicate continued connections with their ancestors, possibly to mound-building ancestors of the Mississippian period. Information from these oral histories include observations on the similarity of organization and layout of Mississippian mounds and village space to the organization and layout of descendant Creek communities (Lee 2014; Bartram 1791). These observations have been noted most recently by Melissa Harjo, Muscogee (Creek), Quassarte #2 Tribal Town, Bird Clan (2019), Gano Perez, Muscogee (Creek) Nation, New Tulsa Tribal Ground, Tiger Clan (2019) and Emman Spain, Seminole Nation of Oklahoma, Thlewahlee Tribal Town, and Alligator Clan (2019) in the Ocmulgee Mounds National Historical Park Historic Resource Study (2020 100% draft) and in oral histories from Lee (2014). Finally, descendant Creek people have understood the importance of the Macon Plateau and the Ocmulgee River corridor as the place where their ancestors first “sat down” or confederated after migrating to the East, as recounted by Raelynn Butler, Muscogee (Creek) Nation, Peach Ground Tribal Town, Raccoon Clan (2019).

The tribes carried this heritage with them as they were forcefully removed from their homeland along Nene estemerku (Road of Misery), also known as the Trail of Tears, or as they escaped removal (Odette Freeman and Brian OnTheHill in Lee 2014).

Descendant Creek communities for the Ocmulgee River corridor today include the Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Coushatta Tribe of Louisiana, Kialegee Tribal Town, Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Poarch Creek Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlocco Tribal Town (New South Associates 2020). Other tribes with special interest in the Ocmulgee River corridor include the Cherokee Nation, Eastern Band of Cherokee Indians, and United Keetoowah Band of Cherokee Indians in Oklahoma (Hunt 2020; New South Associates 2020). Where possible, their perspectives on Native peoples who lived on the Macon Plateau and the Ocmulgee River corridor are included in this chapter. In some cases, Native tradition, European written records, and European American scholarship intersect and support each other. In other areas they do not, due to a lack of nuance, language barriers, misunderstanding, or mischaracterization.
History Before European Contact

Paleoindian Period (10,000–8000 BCE)

The populating of North America is believed to have occurred sometime around 17,000 years ago (Wheeler 2007), either through an overland route, an ocean route, or a combination of both (Miller, Smallwood, and Tune 2017). The arrival of the people in North America initiated what we know as the Paleoindian cultural period. These people lived in small, nomadic social units and relied on hunting of megafauna and gathering of wild plants to sustain them (New South Associates 2018; Brewer and Hammerstein 1991) as they explored and colonized the new continent (Wheeler 2007). These peoples occupied a wide area of the United States (Brewer and Hammerstein 1991), including the Ocmulgee river area. The first Paleoindian Clovis spear point in the Southeast was found during the “New Deal” excavations at Ocmulgee Mounds National Historical Park; the spear point was found with good stratigraphic context, establishing a relative age for Clovis points in the region. More Paleoindian projectile points have been found since the New Deal excavations, but they have not been found in situ or with good stratigraphic context (New South Associates 2020; Anderson, Smallwood, and Miller 2015).

Dates for the arrival of Paleoindian peoples in the southeastern United States vary significantly, as little archeological material of these people has survived in the Southeast (New South Associates 2020).

Some scholars support earlier dates such as 13,500 BCE (Day and Klingelhofer 2019), while later dates (about 12,000 BCE) are favored by others, such as Ocmulgee Mounds National Historical Park (NPS 2019). A brief discussion of dating the arrival of Paleoindian people in the Southeast can be found in The New South Associates (2018) draft of the Ocmulgee River Corridor Historic Resources Survey and in the 2017 Southeast Archeological Conference paper, “Five Big Questions for the Paleoindian and Early Archaic Southeast” by Miller, Smallwood, and Tune (2015).

Paleoindian peoples likely used the Macon Plateau, a flattened hill once part of the ancient Ocmulgee River east terrace (Andrews, Collings, and Lee 2014), as a hunting ground or for temporary habitation (Wheeler 2007). In almost all of the material culture recovered at Paleoindian archeological sites on the plateau, there are stone tools, such as projectile points (including datable Clovis points), knives, burins, and scrapers, (Andrews, Collings, and Lee 2014; Fairbanks 1956). These lithic tools were made from outcroppings of high-quality chert and novaculite found in the local area (Anderson, Smallwood, and Miller 2015) and used for processing animals and harvesting of wild plants.
Most of these tools, except for projectile points, remained unchanged for thousands of years (Brewer and Hammerstein 1991).

Because of Paleoindian peoples’ reliance on hunting and wild plants, they used many different landscapes (e.g., terraces, uplands, levees, wetlands) for temporary, seasonal, or semipermanent camps (Anderson, Smallwood, and Miller 2015). Furthermore, the Ocmulgee River corridor possessed a great diversity of flora and fauna due to the variations in topography as well as the area’s location at the confluence of the Piedmont and the Atlantic Coastal Plain ecoregions. The variety of resources along the Fall Line—the geologic transition between the Piedmont region and the Coastal Plain—attracted people to the area and allowed human populations to thrive (NPS 2019; New South Associates 2018; Andrews, Collings, and Lee 2014; NPS 2014a; Smith 1992). Finally, the Ocmulgee River may have also been used for transportation, though no dugout canoes or other watercraft from this period has been identified thus far (Anderson, Smallwood, and Miller 2015).

**Archaic Period (8000–1000 BCE)**

Around 8000 BCE the megafauna began to go extinct as the climate became warmer and drier (NPS 2019; New South Associates 2018; Anderson, Smallwood, and Miller 2015). Despite this change to their food resources, the people at this time still largely lived as small, mobile social units (NPS 2019). People successfully adapted to the changing environment as indicated by an increase in archeological sites dated to this time (White and Anderson 2017). The archeological evidence suggests that seasonal hunting camps were located along major waterways and that there was an increase in population and in trading between populations, as indicated by nonlocal geological resources for lithic manufacture (NPS 2019).

One specific marker for early Archaic peoples’ adaptation to the new climate and resources is a change in the form of projectile points, defined from stratified sites in Alabama, North Carolina, and Virginia (Anderson, Smallwood, and Miller 2015; Brewer and Hammerstein 1991). Early Archaic people also used bone points, fishhooks, shell adzes, wooden canoes, and woven cloth (NPS 2019). By living near major watercourses, they subsidized their hunter-gatherer diet with shellfish, shad, and sturgeon (Wheeler 2007).

Though the division between the early and middle Archaic period is not always clear, by the Middle Archaic period (about 5500–3300 BCE), ground stone artifacts such as steatite (soapstone) bowls, pipes, axes, adzes, plummetls, gorges, and atlatl weights were added to the material culture (New South Associates 2018; Fairbanks 1956). Several steatite (soapstone) outcroppings are located within the Piedmont region along the Fall Line.
Radiocarbon dating of soot from steatite bowl fragments and from organic material found in association with these fragments from the upper Flint River and Coffee County have provided dates of use from the Middle Archaic period and into the Late Archaic period. Near Fort Benning in Chattahoochee County, Georgia, the use of steatite bowls persisted into the Early Woodland period and may show long-distance trade and cultural affinity with people living at Poverty Point, a mounded complex in Louisiana (Elliott 2006). More generalized resource exploitation appears in the area, with riverine and marine fauna and nuts, fruits, berries, and seeds becoming more prevalent in the diet. Some of the seasonal hunting camps show increased modification with storage pits, floors, and a few burials. With continued successful exploitation of resources, the population continued to grow and meet other groups, leading to the formation of trading networks (NPS 2019).

The Late Archaic period features large spring and summer hunting camps along river terraces and smaller camps in the uplands at stream headwaters during the fall and winter (New South Associates 2018). The shift to semisedentary migration patterns and the beginnings of early agriculture also ushered in the creation of ceramics, a major technological achievement (New South Associates 2018), especially fiber-tempered pottery known as Stallings Island in central Georgia. Stallings Island pottery appears around 2500 BCE along the Georgia coast and around 2000 BCE in central Georgia (Williams and Thompson 1999; Brewer and Hammerstein 1991; Lawson 1988). Stallings Island, a large shell midden site located in Columbia County, Georgia, and therefore outside of the study area, is one of the most thoroughly investigated Late Archaic sites in Georgia and has come to define the Late Archaic period in the state (Elliott 2006; Sassaman 1999).

The fiber-tempered pottery and associated carved bone from the site suggests inter- and intragroup identification by the distribution of these artifacts along trade networks (New South Associates 2018; Smith 1992). Low quantities of Stallings Island fiber-tempered pottery have been recovered near Macon (New South Associates 2020) and, in some contexts, the fiber-tempered pottery has accompanied steatite (soapstone) vessel sherds (Elliott 2006). Trade in pottery and associated material culture would also support political and economic relationships between different groups (New South Associates 2018). The later Archaic peoples also made use of a broad range of plants and animals (Day and Klingelhofer 2019), including experimentation with domestication and possibly agriculture (New South Associates 2018).

Woodland Period (1000 BCE–1000 CE)

While the material culture of the Paleoindian and Archaic periods is fairly consistent throughout Georgia, there is a change during the Woodland period (Brewer and Hammerstein 1991). During the Woodland period, more numerous and larger archeological sites indicate an expanding, semisedentary population, perhaps supported by cultivation (Day and Klingelhofer 2019) of sunflowers, gourds, and other plants (NPS 2019).
There is also evidence for increasing monumentalism, which had started in the Middle Archaic period elsewhere in the Southeast (large shell mounds, pyramidal earthen mounds, and effigy mounds); sociopolitical complexity; and long-distance trade (Day and Klingelhofer 2019; New South Associates 2018; Pauketat and Alt 2015; Anderson 2004; Sassaman 1999) that included corn, beans, and squash from Mexico, which became a staple of the Woodland diet (NPS 2019). The Woodland people living in the area built small, circular house structures (Brewer and Hammerstein 1991) and mounds nearby. In addition, there was an increase in middens and refuse, including pieces of pottery (Wheeler 2007; Day and Klingelhofer 2019). Furthermore, the Fall Line seems to have acted as a cultural interactive zone between north and south Georgia (Brewer and Hammerstein 1991).

During this early Woodland period, the material culture was also in transition from fiber-tempered ceramics to grit-tempered ceramics (or a mixture of both). The earliest Woodland period marker in the ceramic material culture in central Georgia is Deptford sand and/or grit-tempered pottery (Bland et al. 2001; Williams and Thompson 1999; Steinen 1995; Lawson 1988). The term “Deptford” comes from the Deptford site (outside of the study area) that was a part of the 1930s New Deal excavations in Georgia (Williams and Thompson 1999).

Deptford ceramics have also been found in Florida, dating to about 600 BCE. Most Woodland period pottery is plain or incised, but simple stamping and check stamping are also present (Brewer and Hammerstein 1991).

The Middle Woodland subperiod (200 BCE–300/400 CE) is marked by the phasing out of the Deptford ceramics and the introduction of Dunlap Fabric Marked (sand tempered), Mossy Oak Simple Stamped (sand and/or fine grit tempered), and some Weeden Island I ceramics (fine sand tempered). The Late Woodland period is marked by the Swift Creek cultural complex, although some Swift Creek material dates to the Middle Woodland period as well (Williams and Thompson 1999; Wood and Bowen 1995; Lawson 1988). The Swift Creek cultural complex, identified in part by its ceramics, may have originated in central Georgia (Brewer and Hammerstein 1991; Fairbanks 1956) and was widely dispersed. While investigations continue into Swift Creek origins, the cultural complex was first defined from the Swift Creek site (within the study area) during the New Deal excavations of the 1930s and 1940s (Steinen 1995). The Swift Creek site was an important mound and village site defining an archeological culture that extended over most of Georgia and into several adjacent states from 0–600 CE (Williams 1993).
Mississippian Period (1000–1540 CE)

A clear change in material culture and sociopolitical complexity marks the beginning of the Mississippian period. Mississippian culture was widespread and is found from Georgia to Texas in the south and northward up the Mississippi River into Minnesota (NPS 2019; New South Associates 2018; Pauketat and Alt 2015; Wheeler 2007; Brewer and Hammerstein 1991). While a migration of Mississippian people is still accepted among archeologists to explain the change in material culture, Bigman (2012) offers a more nuanced view of the changes occurring on the Macon Plateau, noting that migration and displacement did not occur unilaterally. Instead of outright replacement, there was conflict between migrating and local peoples as they negotiated cultural practices, such as habitation layout and location, material culture, and social status (Bigman 2012). If Bigman is correct, then mounds built elsewhere in the Ocmulgee River corridor on the Macon Plateau, such as the Dunlap and McDougal mounds, or such as the mounds at Fort Hawkins, may represent the migratory people (New South Associates 2018). The change in material culture marking the Mississippian period and the identity of the Mississippian people is a continuing area of research.

Mississippian people in the Southeast primarily populated towns along the Fall Line of rivers and developed agricultural settlements, such as those present on the Macon Plateau.

3. Pauketat and Alt (2015) directly link Mississippian peoples and the period’s monumental mound building to the site of Cahokia in Illinois. Pauketat and Alt claim that Cahokians, or “Cahokianized” people, migrated throughout North America and established the mound complex at Ocmulgee. They furthermore connect Cahokia with the Plum Bayou culture, whose center was at Toltec Mounds in Arkansas, and suggest links with native peoples living in Mexico and the American Southwest.

The Ocmulgee Old Fields, located on the Macon Plateau, is an example of this agricultural settlement (Wheeler 2007; Hally and Williams 1994; Williams 1993). Climate change may have also influenced the migration and settlement patterns of Mississippian people as the earth grew warmer during this period and increased rainfall supported increased agriculture (Pauketat and Alt 2015). The easily tilled and drained soils in river valleys are well suited for agriculture, and the Mississippian people supported their large populations with maize, beans, squash, and other crops (NPS 2019; Wheeler 2007; Brewer and Hammerstein 1991) in addition to hunting and gathering (Wheeler 2007). The lakes and swamps supported fish and waterfowl. Within the study area, these population-sustaining food resources are concentrated at the Fall Line rather than being dispersed along the course of the river (NPS 2014a; Hally 1994). The abundance of resources around Macon supported the large Mississippian population and a more permanent habitation (NPS 2019; Wheeler 2007).

Abundant resources, agricultural success, and an increasing population are closely related to, if not the cause/effect of, more permanent towns and increased diversity of material culture (Brewer and Hammerstein 1991).
The complex social structure (chiefdoms) characteristic of this period may have originated earlier in the Woodland period due to evidence at surrounding sites outside of the study area, such as the Leake Site (Bartow County 9BR2) and Kolomoki Mounds State Park (Early County 9EA1), and be more observable due to the agricultural advances and increasing population (Hunt 2020; Southern Research Historic Preservation Consultants and Keith 2021; Weiss and McKithan 1981; NPS 1964; Haag 1963). Early Mississippian people (900–1100/1200 CE) (Brewer and Hammerstein 1991) introduced a complex culture to the region that included new religious and ceremonial elements as well as new tools and ceramics (Day and Klingelhofer 2019). The earliest ceramics of the period show a combination of Late Woodland (Swift Creek and Napier) and Mississippian styles (Steinen 1995; Lawson 1988; Fairbanks 1956). Mississippian ceramics and their regional variations came to dominate in central Georgia and have been used by archeologists to express discrete cultural units during the Mississippian period (Brewer and Hammerstein 1991), such as Macon Plateau, Lamar, and Ocmulgee Fields (Steinen 1995; Lawson 1988; Fairbanks 1956). These discrete cultural units are being continually refined as more information comes to light, and within the last decade definitions of these cultures and of the Mississippian period itself have been questioned (Blitz 2010).

Macon Plateau ceramics (about 900–1200 CE) (Lawson 1988) represent the Mississippian people’s arrival into central Georgia (Brewer and Hammerstein 1991). The ceramic phase is defined from several archeological sites near Macon. Macon Plateau ceramics stand out as the dominant influence in the Ocmulgee River floodplain. Ceramic subdivisions within the Macon Plateau phase include Bibb Plain, McDougal Plain, Halstead Plain, Hawkins Fabric Marked, and Macon Thick (Lawson 1988; Williams and Thompson 1999).

The “Macon Plateau” refers to a number of overlapping landscape, cultural, and archeological features, and it is easy to become disoriented when discussing the historical context of the Ocmulgee River near Macon. The term refers first to the flattened hill along the Ocmulgee River east terrace (Andrews, Collings, and Lee 2014). Secondly, “Macon Plateau” is an artificial term describing a ceramic phase roughly corresponding to same geographical area and dating to 900–1100 CE (Lawson 1988). Third, the term refers to the Mississippian period occupation of the geographical area. Finally, it is used collectively as Macon Plateau site, which refers to the cultural sites uncovered during the New Deal archeological excavations and became Ocmulgee Mounds National Historical Park.
These include the Great Temple Mound (Mound A), Lesser Temple Mound (Mound B), the Funeral Mound (Mound C), the Cornfield Mound (Mound D), the McDougal Mound, the Southeast Mound, Dunlap Mound, Mound X, the palisade trenches and other precontact trenches, corn storage pits, the Earth Lodge, the Dunlap House, and Civil War fortifications. The term, however, does not apply to the Lamar site, which includes Lamar Mound A and Mound B (Small Spiral Mound) and is also included within the park (New South Associates 2018; Georgia Archaeological Site Files; Southeast Archeological Center n.d.). In the mid-1990s, the term, “Macon Plateau Archeological District” was given to the area around Macon and comprised over 50 major archeological sites from the Paleoindian period to after European contact, but this collective term is not used in this document (Barnes 2021; NPS n.d.).

Although there were perhaps other Native peoples living in an earlier town on the Macon Plateau in about 1000 CE, the Macon Plateau ceramic phase (900–1100 CE) (Lawson 1988) extends into the date range for the extensive Mississippian town site in the same area (Day and Klingelhofer 2019). This town (Macon Plateau 9BI1), located within the national park, is the most recognizable archeological feature on the Macon Plateau and includes earth mounds and the Earth Lodge, which were built during the Middle Mississippian period (1100/1200–1350 CE) (Brewer and Hammerstein 1991). The Mississippian people created the mounds, which served as elevated platforms for important buildings. These mounds were built in several distinct building periods, reflecting growing social stratification (New South Associates 2020; Wheeler 2007). In all, there are seven mounds associated with the Mississippian occupation, and of these, the Greater Temple Mound (Mound A) and the Lesser Temple Mound (Mound B) were used for ceremonial purposes and the Funeral Mound (Mound C) was used for burials. Also discovered with the mound complex were a periphery trench, village sites, and storage dugouts (Wheeler 2007). The town began to decline around 1100 CE (Day and Klingelhofer 2019), and the Macon Plateau appears to have been unoccupied for about 100 years (New South Associates 2020). The mound complex was still unoccupied before contact with European exploration in the mid-1500s (Wheeler 2007). After approximately 100 years, Native peoples returned to the area and built a new village two miles downriver (NPS 2019).

Around 1350 CE, Late Mississippian people built a fortified village in the Ocmulgee River swamps 2 miles downstream from the Macon Plateau. This village is known as the Lamar site (Brewer and Hammerstein 1991).
This site consisted of a palisaded village with two mounds (Mounds A and B). Mound B is unique for its spiral ramp, which encircles the mound. Ceramic styles include Lamar Plain, Lamar Complicated Stamped, and Lamar Bold Incised (Wheeler 2007). The Lamar culture, named for this site which serves as its type-site (i.e., earliest and fullest expression), was widespread in the Southeast, and the term has come to describe all late Mississippian ceramic and cultural complexes in the Georgia Piedmont (Brewer and Hammerstein 1991). The Lamar people were similar to other late Mississippian cultural groups with regard to their village layout, which featured a stockade or palisade and a ceremonial center of one or two mounds (NPS 2019) and way of life (e.g., social organization, ceremonial practices, mound building, horticulture). Their distinct ceramic styles and downstream settlement location readily distinguish it from the mound complex and habitation on the Macon Plateau, which preceded the mound complex habitation at the Lamar site (Wheeler 2007).

As mentioned, other Lamar sites in the Southeast regularly feature at least one mound and palisades/stockades. These mound sites are believed to have functioned as political or religious centers for a large, centralized population as well as surrounding communities. The villages associated with the mound sites were probably occupied year-round (Brewer and Hammerstein 1991) due to successful agricultural support.

During the Late Mississippian period, Lamar villages are believed to have been encountered by Spanish explorers such as Hernando de Soto during his expedition into Georgia in 1540 (Day and Klingelhofer 2019; Pauketat and Alt 2015; Hudson 1997; NPS 1988). De Soto’s was the first European expedition that encountered Mississippian people and their mound-building culture and documented what he saw. The arrival of Europeans meant the arrival of diseases to which the Mississippian people had no immunity (NPS 2019), as well as the breakdown of Native food production, trade networks, and family and social institutions. In her survey of US history, Dunbar-Ortiz is critical of the theory that disease was the primary agent in the destruction of Native ways of life, and she states “… that the colonization of America was genocidal by plan …” (Dunbar-Ortiz 2015). The combination of disease, starvation, kidnapping, enslavement, rape, prostitution, murder, warfare, the mission system, and the introduction of alcohol resulted in three-fourths of the population dying after the arrival of Europeans. The lives of Native peoples of North America were forever changed (NPS 2019; Dunbar-Ortiz 2015; Holder et al. n.d.).

History After European Contact

European Exploration and Expansion (1500–1732)

This section takes a broad approach to a dynamic period of contact between Native peoples and Europeans and attempts to capture the complexity of interaction, migration, and cultural change in the Ocmulgee River corridor. Contact with Europeans brought dramatic changes to Native populations’ way of life at all levels, and this period of contact is replete with issues of European characterization and description of Native peoples’ culture and history from their outsider’s perspective.
This section addresses some of the uncertainty surrounding the European written records on place names, Native peoples, and their history (from an outsider’s perspective). The section also includes linguistic histories and ethnohistories of Native peoples from an insider’s perspective. Finally, this section discusses how some Native peoples adapted to the cultural, social, and political changes brought on by contact with the Europeans, particularly the Creek people, whose descendants maintain a connection to the Ocmulgee River corridor.

Arrival of Europeans and European Understanding of Native Tribes

The areas of land that today make up the Southeastern United States were the economic and cultural battleground for Spain, France, and England—all major European powers of the 16th through 18th centuries (Hammack 2011; Hahn 2004). With the arrival of Europeans, material culture and subsistence patterns began to change for the Native populations. Peaches were added to existing cultigens, and hunting practices changed with the introduction of firearms and the deerskin trade (Brewer and Hammerstein 1991). The Spaniards sought to change the culture of Native peoples through the mission system established in Florida, significantly altering Native peoples’ religion, habitation and subsistence patterns, and sociopolitical stratification. The later-arriving English primarily wanted Native peoples as slaves (Waselkov 1994; Smith 1992; Crane 1956) and for trade and manufacture (Hammack 2008).

The ethnohistorical term “Creek Indians” or “Creek” refers to an amalgamation of tribal towns of Muskogean-speaking peoples (as well as Yuchi- and Timucuan-speaking peoples) who once lived in Alabama, Georgia, and Florida and operated as a unified political unit (Hunt 2020; Haveman 2009; Walker 2004).

The term originates from the Ocmulgee River valley and was used by Europeans and Carolinian traders to describe the Native peoples who had settled along the Ocmulgee River around 1690 CE until the Yamassee War around 1715 CE. The Ocmulgee River at that time was known as Ochese Creek, and the people who lived there came to be called “Creek Indians” or “Creek.” These Native peoples had migrated to the Ocmulgee River valley from the Chattahoochee River valley and spoke a Muskogean language dialect known as Hitchiti (Mason 1963, 2005). Hudson uses the term Creek to describe the Lamar-period people living in the tribal town of Ichisi in the Ocmulgee River valley and having contact with the de Soto expedition in 1540 (Hudson 1997). Knight, as well, discusses the similarities and potential development of Lamar period ceramics, Ocmulgee Fields ceramics, and ceramics found in the Chattahoochee River valley before Hitchiti migration (Knight 1994). In a revised repatriation case report in 2014, the Lamar site was identified as the village of Ichisi (Smithsonian Institution 2020), which had been hypothesized in previous reports (NPS 1988). The 2014 report also states that descendants of the Lamar period (1300–1600 CE) community on the Macon Plateau and the Hitchiti-speaking people, also associated with Ocmulgee Fields ceramics (1685–1715 CE), are found in federally recognized Creek and Seminole Tribes (Smithsonian Institution 2020).

In the 18th century, Europeans described the Creeks as Upper and Lower communities based on their relative locations in central Alabama (Upper Creeks) and southwestern Georgia (Lower Creeks) (Walker 2004). There were also Lower Creek towns located along the northern portion of the Apalachicola River in the Florida panhandle (Office of Federal Acknowledgment 2016).
The Upper and Lower designation described geographic location only, as the communities all considered themselves to be culturally Creek and did not recognize the Upper/Lower distinction. The Upper Creeks resided along the Alabama, Coosa, and Tallapoosa rivers in Alabama, while the Lower Creeks resided along the Chattahoochee River valley, with episodic movement to the Ocmulgee River, the Oconee River, and the lower Savannah River (Mason 1963, 2005 reprint; Walker 2004). The term “Creek” as used by Europeans erased the cultural, social, and political variations of the many etvlwv (tribal towns) in Georgia, Alabama, and northern Florida, language families, and tribal worldviews (Lee 2014; Sturtevant and Cattelino 2004).

The term “Creek” also came to represent the lack of European-perceived distinctions in culture between the Creeks, the Tallapoosa, and the Seminole (the latter, a tribe that coalesced when Muscogee (Creek) people and refugees settled northern Florida in the 18th century (New South Associates 2020; Spain 2019; Sturtevant and Cattelino 2004; Swanton 1922; Holder et al. n.d.). Over time, the “Upper Creeks” and “Lower Creeks” adopted a more unified identity to interact with the Europeans and Americans (Lee 2014). By the late 17th century, the Creek Confederacy, a united political unit, formed (Office of Federal Acknowledgement 2016) and continued to encompass communities with diverse ethnic and linguistic backgrounds. The Creek Confederacy had more than 20,000 citizens across more than 50 towns and speaking six distinct languages (Muscogee, Hitchiti, Koasati, Yuchi, Natchez, and Shawnee) (New South Associates 2020). This ethnic diversity and political unification was the Creek Confederacy’s defining characteristic (Andrews, Collings, and Lee 2014; Haveman 2009; Walker 2004).

Finally, although the term “confederacy” has been used to preserve the internal organization of a unified Creek political unit, a more appropriate term to use may be nation, as the Lower Creek tribes who signed the 1733 Treaty of Savannah were recognized (Hunt 2020; Russell 2006; DeVorsey 1970; Georgia Historical Society 1920; McCain 1917; Force 1836). There were, however, still factionalism between tribes within the confederacy, and Hahn has further suggested that the concept of a Creek Nation emerged during the period of the French and Indian War (1754–1763) in response to new European imperialist and colonist policies (Hahn 2004).

With the arrival of the Spaniards in Georgia, more documentation exists about what Native American tribes called themselves. However, Europeans often did not correctly understand the names that Native peoples used for themselves, their towns, and the river valleys near which they lived, so there is not always a one-to-one relationship in names. In addition, there is variation in the names of peoples and where they lived as a result of the phonetic differences between the European languages and the limitation of their alphabets to capture Native language and pronunciation (Andrews, Collings, and Lee 2014). Some of these challenges are presented in Swanton (1922), whose work attempted to trace the movement of all southeastern tribes, particularly those who had Muscogee (Creek) heritage (Swanton 1922).

Despite the changes that Europeans brought, there are continuities of Native culture not only in oral traditions but also in the archeological remains. For example, there is continuity in ceramic development from the 15th into the 18th centuries, leading some scholars, such as Fairbanks, to suggest that Lamar ceramics (from the Mississippian period) is an ancestor to later Creek pottery (Fairbanks 1958).
Fairbanks draws his conclusion from the excavations on the Macon Plateau and Lamar site as well as other sites throughout Georgia and Alabama. He notes the shape and design similarities between the Lamar ceramics of the Mississippian period and the Ocmulgee Fields ceramics of the postcontact Creek tribes (Fairbanks 1958). The Ocmulgee Fields ceramic phase dates from 1685–1715/1716, roughly the same period as postcontact Creek occupation of the Macon Plateau area (New South Associates 2018). There are also, however, precursors for Ocmulgee Fields ceramics in east-central Alabama, which Brewer and Hammerstein call the heartland of the later Creek Confederacy (Brewer and Hammerstein 1991). Finally, Willey and Sears suggest that Creek pottery probably developed in the Coosa–Tallapoosa River area in Alabama and spread east into Georgia (Smith 1992; Willey and Sears 1952).

Native Cultural and Linguistic Traditions Not Understood by Europeans

The oral tradition of the descendant Creek peoples, such as the Alabama-Coushatta Tribe of Texas, the Alabama-Quassarte Tribal Town, Coushatta Tribe of Louisiana, Kialegee Tribal Town, Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Poarch Creek Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlocco Tribal Town are deeply rooted, reaching back to the Muskokatlke (Muscogee people) (Lee 2014) and perhaps even to the people of the Mississippian period. Creek oral tradition holds that their ancestors arrived in Georgia from the west during the Mississippian period through conquest and assimilation of other Native groups (New South Associates 2020; Spain 2019). Other Native tribes that are traditionally associated with the Ocmulgee River valley include the Cherokee Nation, Eastern Band of Cherokee Indians, and United Keetoowah Band of Cherokee Indians in Oklahoma (New South Associates 2020).

Etvluwv (tribal town to Muskokatlke or “band” to Seminole people) is the most important unit of community and political organization. Etvluwv are not permanent or fixed in location, number, relationship, or identity, and they can have mother-daughter or sibling relationships with other etvluwv. Etvluwv additionally encompass ideas of matrilineal tribal heritage, lineage, kinship, ceremonial grounds (such as mound sites) and, in some cases, the idea of an independent nation. The number of etvluwv before European contact is not known (Lee 2014; Hudson 1997; NPS 1988), but early maps reveal more than 80 towns (Butler 2020; Andrews, Collings, and Lee 2014). The population of the area may have been in the thousands (Andrews, Collings, and Lee 2014; Holder et al. n.d.; Swanton 1922). Of these towns, four encountered de Soto’s expedition in 1540, and they have remained in continuous existence as political and/or ceremonial tribal towns for the Muscogee (Creek) Nation (Lee 2014). Additionally, European and American records (and modern scholarship) have not captured important nuances of tribal history, identity, and organization or the continuation of these tribal towns until recently. In oral history interviews with citizens of the Muscogee (Creek) Nation and the Seminole Nation, each interviewee introduced themselves with their tribal town, and as Emman Spain said, “We’re recognized by what our tribal towns are. That’s our identity. That’s our heritage” (Spain 2019 in New South Associates 2020, 11). Additionally, leadership within and among the etvluwv does not conform to European ideas of leadership. The use of the terms “chief,” “king,” or “headman” does not represent the Muskokatlke worldview or the political realities of Native tribes. As explained in the oral history interviews with Lee (2014) within each etvluwv, there are clan groups that are designated for specific functions.
These functions may additionally vary by season, by the etvlwv’s state of peace or war, by gender, or by ground/territory. Mekko to Moskoko is loosely translated as “chief” or “king,” but this position was not one of absolute authority. Instead, the Mekko had a sphere of leadership and influence generally on communal supplies and maintaining balance for the etvlwv. Today, there are other positions of leadership within each etvlwv, and these leaders operate within their own spheres and in consultation with each other, such as the Heles-hayv, who is a medicine maker and spiritual leader; the Hene-ha, the second chief, who may conditionally take superiority over the Mekko; and the Etvlwv Muskokulke, which is the committee that makes decisions, policies, and handles any issues that effects the existence of the etvlwv (Lee 2014). While one should take caution in assigning similar functions of leadership from modern tribe governance into the past, one should also have caution in accepting the terms and definitions assigned to tribal leadership from the European American perspective.

The earliest recorded version of Creek traditional history comes from Chigelly (Chegellie in New South Associates 2020; Chikilli in Swanton 1922), brother of Creek chief Emperor Brimmis—also known as Hoboyetly or Yslachamuque—and designated by him as a Coweta “headman” for discussions with the English, in a statement to General Oglethorpe in 1735. In Chigelly’s account, the Kasihta and the Coweta, both associated with the later Creek Confederacy (Hahn 2004) as well as the Chickasaws, a separate tribe with traditional connections to the Kasihta, came from the west as one group to settle in the east, though the groups later separated (Swanton 1922). Phillip Deere, a Muskogee (Creek) medicine man, further supported the oral history of Chekilli by recounting that the Kasihta people settled around Ocmulgee and the Coweta settled around the Eufaula area (Phillip Deere 2016 in New South Associates 2020).

One of the four founding etvlwv of the Muskogee (Creeks) was Cusseta Town, established on the Chattahoochee River after the Creeks’ migration to the east. Later, when Cusseta and Coweta etvlwv had been relocated along the Ocmulgee River, they formed a confederacy that led to the Creek Confederacy and later Creek Nation (Andrews, Collings, and Lee 2014).

**How European Misunderstandings of Native Cultural and Linguistic Traditions Have Persisted**

Swanton (1922), in his broad attempt to trace the history of Southeastern tribes, notes the variety of languages spoken, grouping various Native language dialects as contributing to the northern and southern “Muskhogean” branch (Swanton 1922). The surrounding peoples in Georgia may have spoken Hitchiti, and they may have called the Muskogee speakers “Ochese” or “outsiders” (Swanton 1922), a name that is recorded by the de Soto expedition in the Ocmulgee River corridor (Hammack 2008). The precise date for this movement of Muskogee speakers east is unknown (Brockington and Associates 1999), but it occurred at such an early time that separating the Hitchiti speakers and the Muskogee speakers is difficult (Swanton 1922). Fairbanks also pointed to a linguistic relationship between the Muskogee-speaking Native peoples living in central Georgia during the late Lamar period and the postcontact Creek Indians (Fairbanks 1958; Brewer and Hammerstein 1991). As discussion and research has continued, elements of Lamar-style ceramics have been noted in Creek, Cherokee, and Yuchi ceramics. Lamar pottery was widely dispersed and may have been manufactured by Muskogee-speaking Native people in the middle Coosa-Tallapoosa area and in northwestern Georgia.
The pottery may also have been manufactured by Hitchiti-speaking people along the lower Chattahoochee River and the middle Oconee and Ocmulgee Rivers (Hally 1994). Though the Macon Plateau mound complex appears to have been temporarily abandoned before the arrival of Europeans in Georgia (Wheeler 2007), the close association of the shape and design of Mississippian period ceramics, in addition to the close linguistic relationship and oral histories, indicates the continuation of culture into the period of early contact with Europeans.

Early Encounters between Native Americans and Spanish Explorers in the Ocmulgee Region

Three parties of Spanish explorers traveled through parts of the southeastern United States in the 16th century: Hernando de Soto, from 1539 to 1543; Tristán de Luna, from 1559 to 1561; and Juan Pardo, from 1566 to 1568. Of these, the expedition led by Hernando de Soto (Hudson 1994; Smith 1992) encountered people who may have been associated with the Lamar culture (Day and Klingelhofer 2019). In addition to visiting the Lamar site (New South Associates 2018), de Soto may have also visited the Bullard’s Landing site (Williams and Evans 1993) and Cowart’s Landing site (New South Associates 2018; Smith 1992). From oral interviews with citizens of the Muscogee (Creek) Nation, the Seminole Nation of Oklahoma, and citizens of Thlopholocco Tribal Town and Ahbika Tribal Town, de Soto encountered at least four etvlwv during his journey through Georgia, and these etvlwv have persisted as political and/or ceremonial tribal towns in the Muscogee (Creek) Nation in Oklahoma (Lee 2014).

The de Soto expedition recorded the name of a town in present-day Georgia as Ochese/Ichisi (Hammack 2008). The Ocmulgee River itself was called Rio de Uchese by Spanish explorers (Andrews, Collings; and Lee 2014). Brockington and Associates (1999) note the close linguistic relationship between “Ichisi” and “Ochese.” After departing from the first village of Ichisi, de Soto traveled up the western bank of the Ocmulgee River to a place where he and his men were taken across the river to the main town of Ichisi (likely the Lamar site) (New South Associates 2020; NPS 2019; NPS 1988; Hudson 1994). De Soto only remained in the main town of Ichisi for one day, as he wanted to press on to Ocute, located in the Oconee River valley to the east. According to Hudson (1994), the chief of Ichisi gave de Soto a guide who spoke the language of Ocute, implying that a language difference existed between Ichisi and Ocute (Hudson 1994). The language that was spoken at Ichisi is not known, but it was most likely Muskogee or Hitchiti (Brockington and Associates 1999).

Soon after the arrival of de Soto, the Lamar population declined as a result of European-introduced diseases, starvation through the disruption of traditional food production and trade routes, kidnapping, enslavement, and the rape of Native peoples by Europeans, and warfare and conflict as Europeans sought Native resources and territory (NPS 2019; Dunbar-Ortiz 2015; Holder et al. n.d.). The remaining indigenous people left the area around 1600 (Wheeler 2007). By 1650, the people living on the Macon Plateau had relocated to the Chattahoochee River (Wheeler 2007; Brockington and Associates 1999; Studstill 1997). The population decline and interaction with Europeans also began changing the Native sociopolitical structure (Countryman 2000; Smith 1992).

The ability of Muskoke etvlwv to transform, absorb, and consolidate other tribal groups, including those with linguistic differences, is foundational to the Muskokev worldview. These different tribal groups and etvlwv would come under the protective role of the Esti Muskoke em Etehuvlwkv, an ancient confederacy of etvlwv that preceded the Creek Confederacy.
The *Esti Muskoke em Etehvlotku* was, however, more fluid and all-encompassing of heritage, identity, and social bonds than the term “confederacy” allows. While the Ocmulgee site in Georgia may have been the political center for the later Creek Confederacy, a central authority among the *Muskoke etvlwv* was situational and mobile rather than fixed or in a single location (Lee 2014). Thus, migrations or changes in the location of a central authority do not have the same permanency or sense of abandonment and unimportance that appears in European/American writing of the Creek peoples. As more and other Europeans arrived in Georgia, the names of the Ocmulgee River as well as Native tribes became convoluted by Spanish, French, and English explorers in the late 1600s (Hammack 2008). The English called the river Ochesee Creek, and this name (or Achese Creek) was the name of the Ocmulgee River between 1686 and 1716 (Andrews, Collings, and Lee 2014). While this is the dominant narrative, the continued existence of the four *etvlwv* encountered by de Soto in the 1540s to at least 2013 (Lee 2014) provides a fuller picture and richer understanding of what was occurring in Georgia and elsewhere during these times.

**Trade and Resistance**

The Creek towns along the Chattahoochee River split into pro-Spanish and pro-English factions. Beginning in 1685, English competition lured most of the profitable trade traffic to the new colony of South Carolina (Waselkov 1994). In retaliation, in 1686, the Spaniards burned four Creek towns: Coweta, Kasita, Kolomi, and Taskigi, whose occupants would not make alliances with them (Hammack 2008; Smith 1992). The people of these towns, especially Coweta and Kasita (Freeman 2019), moved east to the Ocmulgee River, where Carolina traders were establishing a series of trading posts (Hammack 2008) to escape Spanish control (Waselkov 1994).

In 1690, the Spaniards attempted to regain control of trade through the establishment of a small military post near the town of Coweta (Waselkov 1994).

The people of eight or nine other towns soon followed, including Atasi, Achito, Chiaha, Kialegee, Okmulgee, Osuchi, Sawokli, Yuchi, and a Westo/Chichimeca town (Hammack 2008). Smith lists 10 to 11 towns and notes that Achito may have been the town of Hitchiti (Smith 1992). Other towns did not move but remained along the Chattahoochee River. The people settled in two primary areas along the Ocmulgee River. One group of towns was near Macon where Walnut Creek empties into the Ocmulgee, and the other group was not far from where the Towaliga River flows into the Ocmulgee. The English grouped all of the relocated indigenous people together, calling them the “Ochesee Creek Indians,” a name later shortened to the “Creeks” (Hammack 2008; Ramsey et al. 1995; Swanton 1922). This grouping of Native peoples by Europeans, as well as Native peoples’ own agency in maintaining or changing their *etvlwv*, cultural identities, affiliation, and confederation, has led to difficulties in European American understanding of Native peoples during this dynamic period. This failure to understand the nuances of Native peoples’ cultures and identities and to force worldviews on tribes are hallmarks of this period’s cultural interaction and has persisted in European American academic circles, scholarship, and government institutions (Andrews, Collings, and Lee 2014). However, the Creeks, no matter their earlier or later tribal affiliation or ethnic heritage, were largely farmers in the river bottomlands (O’Donnell 1975), such as the Ocmulgee Old Fields near the Ocmulgee River (Hammack 2009).

When first recorded in 1675, “Ocmulgee” did not refer to the river but to a Lower Creek town on the Chattahoochee River (Andrew and Collings 2014; Walker 1994).
“Ocmulgee” has been variously translated as big spring, bubbling spring/water, or boiling spring and appears to be a Hitchiti word. The word “Omulgee,” however, is a Muscogee word and means “all of them” or “all of the tribal towns together” and may have a wider connotation of “homeland” or “medicine” (New South Associates 2020; Butler 2019; Lee 2014; Perez 2019). Gano Perez, in an oral history interview, notes that the association of “Ocmulgee” with water reflects the importance of water to their culture, and that the tribe has always settled along waterways. Perez also acknowledges that “Omulgee” could be associated with “Ocmulgee” and represents the different tribal towns and their heritage along waterways (Perez 2019).

Along with other Creek towns, the people living in Ocmulgee migrated to Ochese Creek, and by 1685, the name Ocmulgee became associated with the river (Andrews, Collings, and Lee 2014; Brockington and Associates 1999). European written records indicate that the “Okmulgees” were on Ochese Creek in 1696 when the governor of South Carolina wrote of them. They were still there in 1703 when Colonel James Moore left “Ockomulgee” to raid the Apalachee Indian settlements (Walker 1994). Ocmulgee, the town along Ochese Creek, was listed as a signer of a treaty of alliance in 1705 between the Carolinians and the Creeks (Andrews, Collings, and Lee 2014). The Ocmulgee people and their town were still at Ochese Creek in 1710 when trader James Lucas wrote a letter from “Oakmulgas.” The Ocmulgee returned, however, to the Chattahoochee River area in 1715 as a result of the Yamasee War, for James Adair reported that Carolinians destroyed the town in that year. In 1716, the Spaniards listed “Ocmulque” as an Apalachicola town on the Chattahoochee (Walker 1994), confirming this move. Based on oral accounts, maps, and Native tradition, it appears that the Ocmulgee people and town located on Ochese Creek were Hitchiti speaking.

There is still some uncertainty as to when Muscogee-speaking people settled among the Hitchiti-speaking people after migrating from the west (Andrews, Collings, and Lee 2014; Hammack 2009) and how these groups interacted.

The Native peoples in Georgia had developed a vast trade network (Freeman 2019; Ramsey et al. 1995) and familiarity with European material culture as early as 1513 or possibly earlier (Smith 1992), even before the arrival of Europeans in the region. Native groups were familiar with European trade goods before English traders moved westward from Charlestown in the 1680s to compete with Spanish traders (Waselkov 1994). The arteries for trade included the Ocmulgee River and the Uchee Trading Path. This overland trail went from Charleston through Creek villages on the Oconee River, the Ocmulgee River, and the Chattahoochee River and through Alabama to Chickasaw settlements. The trail was known to Colonel Benjamin Hawkins, the primary federal agent for Indian affairs in the South from 1796 to 1803 and the primary agent for the Creeks after 1803 (Remler 2005). In the late 18th century, he described the environment along the Ocmulgee River and named the ethnic groups that inhabited the area (Andrews, Collings, and Lee 2014).

An extended period of low-volume, indirect trade allowed Creek people to make important adaptations before the 18th century. One was the gradual development of the Creek Confederacy (Waselkov 1994). The confederacy was a loose organization of towns that maintained cohesiveness by extending consensus decision making beyond intratown boundaries to resolve intertown conflicts (Hahn 2004). Such a political organization may predate the arrival of de Soto (Lee 2014), but by 1670 CE Creek people were organized into a confederacy (Ramsey et al. 1995).
This political organization allowed Creek people to assimilate numerous other tribes, ethnicities, and refugees into their tribal organization (NPS 2019; Wheeler 2007; Studsill 1997; Waselkov 1994). The oral traditions of the modern Muscogee (Creek) and Seminole Tribes reflect and recognize this shared heritage and this amalgamation of individual societies (New South Associates 2020; Spain 2019; Brockington and Associates 1999; Brewer and Hammerstein 1991).

The second adaptation to 18th-century Creek society was the gradual and selective adoption of European material culture (NPS 2009; Waselkov 1994). In 1685, English-allied Creek people allowed the first English trading post to be established within their territory at Coweta (Ramsey et al. 1995). By 1690, English-allied Creek culture had synthesized both traditional and European artifacts, values, and activities in a new cultural format (Waselkov 1994). The increasing trade between the Creeks and the English led to the top 1% of Creeks, made up of those of mixed Native and European ancestry, becoming wealthy (Hunt 2020). Other groups of Creek people were increasingly drawn into warfare and enslavement as they rejected the increased trade, rejected European material goods and culture, or had allied with Spanish or French traders over English traders (New South Associates 2020), although it also ushered in the decline of traditional lifeways and culture as other English trading posts were established (Ramsey 1995). The widespread similarity in Creek culture at this date can be seen in a comparison of the archeological remains from Macon and contemporaneous sites in the Coosa and Tallapoosa Valleys (Waselkov 1994).

With growing trade and contact between Europeans and Creeks, intermarriage between the groups increased, particularly between British and Scots–Irish men and Lower Creek women, most often women from the family of the Mekko.

The previously connected worldview and ideology between the Upper and Lower Creeks continued to divide and separate, brought on in part by the new mixed-ethnicity elites of the Lower Creeks (Lee 2014). Colonel Benjamin Hawkins encouraged this division between the Upper and Lower Creeks by elevating the Lower Creek Mekko into positions of authority within the Creek National Council. The National Council was formed at the end of the 18th century under pressure from Hawkins and the US government to organize the Esti Mvskoke em Etelhvlvtkv (Lee 2014) into a state structure that more represented European American government organizations (Kokomoor 2018). The United States would further expand this divide by designating the Lower Creek Mekko who would represent the entirety of the Muskokvlke (Lee 2014).

A final adaptation occurred among the Creek peoples between 1670 (the founding of Charleston) and 1763 (with the Treaty of Augusta) with the adoption of a position of neutrality between the competing European empires (Spain, France, England) in the area (Hahn 2004). As the Creek Confederacy was located centrally between the territory that each European nation desired to control (Ramsey 1995), this neutral position allowed the Creeks to fare better than other tribes into the 18th century. By the time of the Yamasee War (1713–1714), the position of neutrality was formalized (Hahn 2004). The position of neutrality is a still a key marker of Creek cultural identity (tribal consultation, April 28, 2020).

In 1690, an English trading post (Ocmulgee Trading House) was located on the Macon Plateau. The trading post was archeologically documented during New Deal excavations conducted in the 1930s and 1940s (NPS 2019; Wheeler 2007; Waselkov 1994).
The small size and configuration of the Ocmulgee trading post resembles the palisaded English warehouses reported elsewhere during this era. Wheeler suggests that the trading post was constructed by English traders from Charleston (Wheeler 2007), but Waselkov suggests that Creek labor and methods were employed for the construction of the trading post though under English direction. Datable European-made objects from the trading post point consistently to the period between 1680 and 1720, which corresponds to the only documented period of large-scale, postcontact Native occupation of the Macon Plateau, roughly the Ocmulgee Fields period between 1685 and 1690 and 1715 and 1716 (New South Associates 2018; Waselkov 1994). There was continual pressure from the Spaniards in the form of raids, and the English responded with raids of their own (Waselkov 1994), possibly from the trading post (Wheeler 2007) and through the establishment and strengthening of forts. The threat of further attacks from the Spaniards was eliminated by 1704 with the devastation of the Apalachee missions of north-central Florida by Colonel James Moore’s army (Hammack 2008; Waselkov 1994).

On a larger scale, the English, Spanish, and French traders were vying for control of the Southeast, and unscrupulous Carolina traders exacerbated the situation (Wheeler 2007). During this time, traders were regularly undermining the authority of colonial officials and governors (Crane 1956). As a result of this conflict over land ownership, enslavement, and trade (NPS 2019), Creek Chief Emperor Brimms—also known as Hoboyetly or Yslachamuque (Brockington and Associates 1999)—emerged as a leader among the Creeks (Andrews, Collings, and Lee 2014) and his allies (the Yamasee, Creeks, Choctaws, and to a lesser extent, the Cherokee (Crane 1956)) against the English and planned a revolt at Coweta Town on the Ocmulgee River (Hammack 2011, 2008; Wheeler 2007).

Yamasee Indians attacked English settlements in South Carolina, and the resulting war (Yamasee War 1715–1716) nearly eradicated the Yamasee Indians (Ramsey et al. 1995) and almost destroyed the Carolina colony. It was after the Yamasee War and the English victory (Hammack 2011) that the Creek policy of neutrality between the European powers was formally stated at Coweta (Hahn 2004).

The historical and archeological evidence points to a widespread migration of the Lower Creek people, including the Uchee (Yuchi) from the Ocmulgee River to the Chattahoochee River around the time of the Yamasee War (Freeman 2019; NPS 2019). James Adair, who wrote descriptions about the southeastern tribes, as well as the Ocmulgee Old Fields in the early 1700s, mentions the destruction of the settlement of Ocmulgee in 1715 during the Yamasee War (Bland 2001; Adair 1775). A single date for this widespread migration is not known, though, and possible dates include 1715 (Walker 1994; Smith 1992), 1716 (National Register of Historic Places Nomination 1996 amendment), 1717 (Hammack 2009) and 1720 (Wheeler 2007). The migration to the Chattahoochee River may have resulted in a power vacuum along the Ocmulgee River (Andrews, Collings, and Lee 2014; Hammack 2011). Although there were significant social and political changes among the Lower Creeks, there is a possibility that the Upper Ocmulgee River was not completely abandoned, and some Ichisi descendants continued to occupy the area during the Yamasee War (Hammack 2009). Future archeological work may uncover more village sites.
Colonial and Revolutionary War Period (1733–1783)

With the establishment of the Georgia colony, more Europeans arrived and began to write about the Native peoples, their customs and traditions, and the area’s flora and fauna. New negotiations between English and colonial traders and Native peoples occurred. As discontentment grew among the colonists for representation in Parliament, discussions turned to independence from England. The ensuing war forced Native tribes to choose to support either the colonists or the English, while trying to maintain their landholdings and culture from the expansion pressure.

Foundation of Georgia and Westward Expansion

After the Yamasee War, Europeans, particularly the English, aggressively colonized and settled Georgia and continued to push westward along the frontier to create and dominate trade relationships with Native peoples. By 1733, the English colony of Georgia was founded, and the colonial government authorized trade and trade relationships. Under the 1733 charter, Catholics, enslaved people, and rum/spirits were banned. General James Oglethorpe was a member of the English Parliament (Hammack 2011) and the leading trustee of the colony, and he worked to develop peaceful relationships with the Native tribes and to limit the Spanish presence in the southeast (Day and Klingelhofer 2019; Countryman 2000). The first law that was passed for the administration of the colony, and to accomplish these goals, was “An Act for Maintaining the Peace with the Indians in the Province of Georgia” in 1733 (DeVorsey 1970). Mary Musgrove, the daughter of a Creek mother and an English trader, served as Oglethorpe’s translator during the establishment of Georgia (NPS 2019).

The Muscogee Creeks and the Cherokee populations during this time held and exercised political agency in negotiations with the colonial authorities (Day and Klingelhofer 2019; Countryman 2000). In the 1733 Treaty of Savannah between leaders of Lower Creek tribes led by Tomochichi, and James Oglethorpe, ancient Creek landownership rights were acknowledged in the document. The Lower Creeks were also described as a nation of allied tribes, each having their own government, but speaking the same language. This treaty established the first formal territorial limits of the colony, though no map was made at the time and further declared that the land the tribes retained was held in common by the nation (Russell 2006; DeVorsey 1970; Georgia Historical Society 1920; McCain 1917; Force 1836). Oglethorpe and the Georgia Trustees would affirm this treaty in 1736 and again in 1739 (DeVorsey 1970).

In 1739, Oglethorpe and one of his rangers visited Creek towns on the Chattahoochee and Ocmulgee Rivers and wrote a short account of the Mississippian period mounds they saw on the Macon Plateau (Wheeler 2007). The mounds the ranger described were probably Mounds A, B, and C of the Macon Plateau site (Walker 1994). A later account of the mounds was made by James Adair (1775) and by botanist William Bartram in a journal of his travels (1791). Bartram wrote a more detailed description of the mound site and mentions that the trading road (Lower Creek Trading Path) runs (NPS 2019) through the “Oakmulge fields.” Bartram also notes that Creeks state that the Ocmulgee Fields is remarkable for being the first settlement where they established themselves after their emigration from the west. From here, the Creeks drove off the previous inhabitants, defended themselves against enemies, and as they grew in power began taking vanquished and refugee tribes into their confederacy (Bartram 1791).
Europeans continued to push westward, and there were intermittent wars, political conflicts, and removal treaties for several years (Day and Klingelhofer 2019). The colony of Georgia had also undergone a change in governance, from being controlled by the trustees to becoming a royal colony (Doherty and Doherty 2005) in 1752. At this time, enslaved people from Africa were introduced into Georgia, and the colony grew rich on plantation agriculture of rice, indigo, tobacco, lumber, and the deerskin/fur trade (Hammack 2011). The French and Indian War (1754–1763) impacted Georgia as well since France yielded its landholdings east of the Mississippi River (except New Orleans) to England. This allowed the English royal colony to expand rapidly westward (Doherty and Doherty 2005), coming into more conflict with the Creek who lived there. The governor of Georgia and other diplomats, seeking to acquire more land from Creek tribes, were met with heavy diplomatic resistance from the Creek Confederacy (Kokomoor 2018). In 1763, a meeting was held in Augusta, Georgia, between colonial and Creek leaders, and the resulting Treaty of Augusta facilitated the loss of 2.4 million acres of Creek territory to the colony (Doherty and Doherty 2005). As with many of these land treaties, the legality was questioned. According to the established practices of the Creek Confederacy, the treaty needed the consent of all of the tribe, not just the influential headmen of the Creek towns, and the entire tribe had not consented. Despite this, the cession of lands proceeded anyway at the Augusta council (Kokomoor 2018). As is widely noted, the treaties and loss of land would reach the Ocmulgee River corridor by 1805 (Day and Klingelhofer 2019; Hammack 2011; Joseph, Hamby, and Long 2004; Ramsey et al. 1995; Curtis 1993b; Butler 1879).

The Georgia colony continued to expand, and 10 years later in 1773, a new treaty was drawn up among the governor of Georgia, English and colonial traders, and the Creek and Cherokee tribes (O’Donnell 1975). In this treaty (called the “New Purchase”), lands that had been ceded by the Cherokee to remove their trading debts were claimed to have also belonged to the Creeks, raising a legality issue. Additionally, the Georgia authorities and traders did not consult with the entirety of the Creek Confederacy, leading to another question of legality in the land cession. As a result of these unscrupulous and questionably legal treaties, there was increasing factionalism within the Creek Confederacy that was laid bare following a Christmas Day attack on settlers along the northern frontier of Georgia. Perpetrators of the attack belonged to the small outlying village of Coweta Town (not the same as the Coweta Town on the Chattahoochee River (Kokomoor 2018)), situated on the Ocmulgee River. Creek headmen could do little except condemn the actions. Their limited ability to act, restricted by requirements of their political position, turned an isolated attack into a regional crisis and the gradual dissolution of the Creek Confederacy (Kokomoor 2018).

As the American Revolution (1775–1783) was underway, the colonial government of Georgia, briefly an independent nation until incorporated into the United States under the 1781 Articles of Confederation (Hammack 2011), continued in its negotiations with the Creeks and the Cherokees. As part of the frontier during the American Revolution, Georgia’s colonists were divided politically over the English and American causes (O’Donnell 1975). The colonists were also divided about the growing factionalism between the Creeks and the Cherokees, who were negotiating their positions and land ownership in this new landscape, and the Choctaws, who maintained a long-held feud with the Creeks.
By 1778, the English had invaded Georgia and shortly thereafter resumed control of the colony. The deaths of Indian agents as well as tribal leaders continued to change the political landscape and the ability to negotiate. Finally, in 1782, Alexander McGillivray, an Indian agent with a Scottish and Creek heritage, assumed leadership of the Upper Creek towns. He described himself as “principal chief of all of the Creeks” (O’Donnell 1975, 10), however, and acted as the spokesperson for Upper and Lower Creeks. McGillivray resisted continued expansion into Georgia, although not all of the tribal headmen took the same position as him (O’Donnell 1975).

**Early Republic and American Expansion Period (1783–1821)**

The independence of the former English colonies (including Georgia) was recognized in 1783 (Hammack 2011). The American Revolution, however, was a disaster for Native populations, who were excluded from the new country and its laws of governance and were pressured to give up more land and their cultural practices through assimilation. Native populations did not view the revolution as a new outcome but rather as one of a series of conflicts (Ramsey et al. 1995). However, Native populations would adapt rapidly to the changing circumstances in the years that followed (Countryman 2000).

By 1783, 15 Creek leaders again met with Georgia officials in Augusta and negotiated the Treaty of Augusta. In this treaty, the leaders agreed to cede their lands between the upper Savannah and the Upper Oconee Rivers. McGillivray was not present at this negotiation, and as a result, the American and Creek Confederacy groups in the negotiation considered McGillivray’s group as having accepted the treaty by default (this was not his intention). Furthermore, McGillivray refused to sign any treaty for the next seven years (O’Donnell 1975), though other treaties were drawn up and signed between the United States and the Creek Nation (Ramsey et al. 1995). Diplomacy and acculturation were the main conduits for interactions between American and tribal authorities, and while warfare was commonplace elsewhere along the western frontier, it was muted in Georgia. One of the major proponents of this acculturation was Colonel Benjamin Hawkins (Smith 1992), the primary federal agent for Indian affairs in the South from 1796–1803 (Remler 2005) and who lived in the Ocmulgee region.

Events near Savannah in 1792 had rippling effects across Georgia and the Ocmulgee River valley. Eli Whitney invented the cotton gin, and his invention increased the productivity of one worker up to 50 times. Increased productivity, decreasing cotton prices (Burns 2007), and the proliferation of enslaved labor to use in cotton production (New South Associates 2018) allowed cotton to become the primary cash crop of the South. In order to capitalize on the demand for cotton and turpentine, town and manufacturing development increased near rivers (Hammack 2008). Macon, Hawkinsville, and the Ocmulgee River would join in the new industrialization of the time (Burns 2007). Eventually, protection of slavery and a plantation-based economy would lead to the Civil War (New South Associates 2018).

At the beginning of 19th century, the Creek Nation consisted of dozens of communities bound together by a centralized political entity—the National Council (Kokomoor 2018). The Creek Nation, which was an adaptation to the crises affecting the Creek people during the preceding century, was distributed through present-day Georgia, Alabama, and the Florida panhandle.
The National Council, brought about by the crises of the 1770s where the headmen could not exercise authority, both created and enforced regional laws. The National Council was based on European American political organization and would come to administer the Creek state (Kokomoor 2018), taking away tradition and authority from the *Esti Muskoke em Etehvlutkv* (Lee 2014).

By 1806, numerous treaties eventually designated the Georgia boundary at the Ocmulgee River (Day and Klingelhofer 2019; Hammersack 2011; Joseph, Hamby, and Long 2004; Ramsey et al. 1995; Curtis 1993b; Butler 1879). In the Treaty of 1805, the Creeks ceded all of their lands east of the Ocmulgee except for a 15-square-mile tract called the Ocmulgee Old Field, which included both the Macon Plateau and Lamar archeological sites (Wheeler 2007; Walker 1994). In this treaty, the Creeks granted the United States the right to establish and maintain a military and a trading house within the 15-square-mile tract (Curtis 1993b; Butler 1879). Although the Creeks retained title to the land, they allowed the building of Fort Hawkins in 1806 (Elliot, Matthews, and O’Steen 2013; Joseph, Hamby, and Long 2004; Walker 1994), establishing the first permanent American settlement along the Ocmulgee River (Hammack 2011).

The Uchee Trading Path also became an important feature during the 1805 Treaty as a way for the United States government to control infrastructure and improve transportation from the eastern coast to the interior. The US government improved the road from Fort Hawkins westward, and by 1812 the road connected Fort Hawkins to Fort Stoddart north of Mobile Bay (Andrews, Collings, and Lee 2014; Elliot, Matthews, and O’Steen 2013). Pulaski County, which had once been the capital of the Creek Nation, and Twiggs County were established in 1808 and 1809, respectively (City of Hawkinsville and Pulaski County 2020; Twiggs County 2019).

Colonel Benjamin Hawkins picked out the land for Fort Hawkins at a strategic spot overlooking the river (Butler 1879). Fort Hawkins was garrisoned in 1807, although it never saw military action (Curtis 1993b). Rather, it served as a center of commerce and diplomacy between the tribal and American authorities (Day and Klingelhofer 2019) for 18 years (Elliot, Matthews, and O’Steen 2013). During the War of 1812 and through the subsequent Creek War of 1813–1814, Fort Hawkins was a point for the deployment of troops (Hammack 2011), and some of these troops were Native American (Creek and Yuchi). Soldiers from Fort Hawkins were vital to General Andrew Jackson’s victory in the Battle of New Orleans in 1815 (War of 1812) (Elliot, Matthews, and O’Steen 2013). During the Creek War, brief skirmishes occurred approximately 2 miles away, and a battle was fought on the opposite side of the river. Additional forts were constructed under order of General Blackshear along the Ocmulgee River as a result of ongoing tensions between Creek factions and the United States (Butler 1879). Additional fragmentation of tribal towns occurred after the Creek War with some people moving to Florida, which was still under Spanish control (Spain 2019).

In 1817, the western frontier of the United States had moved on to Fort Smith, Arkansas (Elliot, Matthews, and O’Steen 2013). By 1818, white settlers had leased land surrounding Fort Hawkins for settlements (now part of the Fort Hill Historic District and East Macon Historic District) (Curtis 1993a, 1993b). From 1819 to 1824, soldiers and equipment for war were slowly moved and the fort was decommissioned (Elliot, Matthews, and O’Steen 2013).
Native American Removal, Antebellum, Civil War, and Reconstruction Period (1821–1900)

As the frontier of the United States continued to push west, more conflict arrived in the Ocmulgee River corridor. By the mid-19th century, the removal of Native tribes to Indian Territory allowed for the expansion of plantation-based agriculture, which relied on enslaved labor. The expansion of plantation-based agriculture brought new economic opportunity and increased overland transportation of raw goods to industrialized centers. The cumulative effects of this period enriched the European American towns in the Ocmulgee River corridor in the early and mid-19th century, but by the end of the Civil War, the towns and communities struggled. While the period of Reconstruction brought positive changes that improved the lives of formerly enslaved African Americans, white resistance to change brought racial terror to these newly freed people.

Indian Treaties and the Establishment of Counties within the Ocmulgee River Corridor

In 1821, the First Treaty of Indian Springs between the United States and 26 Creek headmen ceded land between the Flint and Ocmulgee Rivers and the land upon which Fort Hawkins stood (Hammack 2011; Wheeler 2007; Butler 1879). Anger over this treaty led the Creek National Council to resolve never to cede more ancestral land (Maloney 2011). As a result of the treaty, the State of Georgia created new counties including Houston County, which was settled via land lottery with preference going toward military veterans (Hammack 2011). A farm community called York, now known as Warner Robins, sprang up soon after the establishment of Houston County (Head 2005).

A year later in 1822, Houston County was further divided, Bibb County was legislated (Hammack 2011), and authority was granted to construct public buildings and to lay out the city of Macon (Butler 1879).

In 1823, James Webb conducted the survey and layout of Macon. Land parcels in Macon sold quickly and houses were soon built. In 1824, Macon became an incorporated town (Butler 1879). In the same year, Fort Hawkins became a civilian facility (Elliot, Matthews, and O’Steen 2013). The town continued to grow and began to look toward cotton and enslaved labor for commerce. The first railroad survey in the state was for a railroad between Macon and Milledgeville in 1825, though no action toward laying track was taken at this time (Butler 1879). In the 1820s, commerce and trade continued to rely primarily on the Ocmulgee River via log rafts under the direction of pole-handling crews of enslaved people. Landings connected the settlements along the river all the way to towns such as Darien on the East Coast, where the raw agricultural goods or timber were processed (Hulett 2004). By 1829, steamboats on the Ocmulgee River were servicing Macon (Hammack 2011) along with the barges, flats, and other traffic transporting cotton, and the combination of river and later rail transportation supported further industrialization in the area (New South Associates 2018; Andrews, Collings, and Lee 2014; Burns 2007).

In 1825, Creek leader William McIntosh, the son of a Scottish trader and a Creek mother, and other headmen signed away the remaining Creek land in Georgia for territory in present-day Oklahoma. The transaction occurred via the Second Treaty of Indian Springs without approval of the Creek National Council and with opposition from the majority of Creek chiefs (NPS 2019; Andrews, Collings, and Lee 2014; Haveman 2009; Green 1982; Armistad 1957).
After a long debate, the Creek National Council appointed a group of over 100 warriors from the ceded land to execute McIntosh, two of his sons-in-law, and Etomme Tustunnuggee, the second chief of Coweta who had signed the treaty for the illegal sale of land. The leader of this group was Menawa, a war chief from the Creek village of Okfuskee, who had previously led the Red Stick forces against Major General Andrew Jackson’s forces at the Battle of Horseshoe Bend. At this battle, McIntosh had mustered Creek forces at Fort Hawkins, allied with the Americans, and fought against Menawa and the Red Stick forces. (NPS 2019, 2017; Elliot, Matthew, and O’Steen 2013; Maloney 2011; Green 1982, Armistad 1957; Butler 1879). A delegation from the Creek Nation was able to nullify the illegal treaty in 1826 and sign the Treaty of Washington. This treaty restored the land that was lost in Alabama but not the land that was ceded in Georgia. (Haveman 2017, 2009; Green 1982).

For the next decade, many Lower Creek people suffered and starved as European Americans continued to move into Creek territory and force them off of their land (Haveman 2009). By 1828, Fort Hawkins, the surrounding land, the mounds nearby and on the Macon Plateau, and the former Creek reservation of the Ocmulgee Old Fields were sold. The origins of the mounds had been lost to the new European American population, but the origins were not lost to the Creek peoples (Hunt 2020; Pauketat and Alt 2015; Wheeler 2007; Walker 1994; Butler 1879).

A few years later, the Georgia General Assembly granted a portion of Houston County to Pulaski County. This land is now the City of Hawkinsville, incorporated in 1830 (City of Hawkinsville and Pulaski County 2020; Hammack 2011) and named after Colonel Benjamin Hawkins. When the city was incorporated, its economy relied on corn agriculture and timber.

However, soon the town grew into an important river port and trade center that transported cotton and other supplies along the Ocmulgee and Altamaha Rivers to Darien on the East Coast. The destruction of railroad lines during the Civil War allowed Hawkinsville to expand further, and by the end of the 1800s, Hawkinsville was the upriver terminus for most steamboats traveling along the Ocmulgee River (Remler 2005).

**Indian Removal and the Nene Estemerkv (Road of Misery) or Trail of Tears**

The 1830s bore witness to the Seminole Wars and the political rise of Andrew Jackson, who visited Macon and Fort Hawkins in his military campaign against Native populations in Florida (Elliot, Matthews, and O’Steen 2013; Hammack 2011). President Andrew Jackson would sign the Indian Removal Act of 1830, which was an extension of the previous treaty process and was carried out under formal diplomacy between the United States and Native populations. The act gave the president power to grant unsettled lands west of the Mississippi in exchange for Indian lands within state borders (Drexler 2019). As recent scholarship has criticized, the act also provided legal validation for the ongoing westward encroachment of European Americans and the US federal government and the total and complete loss of Native American land (Haveman 2009; Countryman 2000). Other authors, such as Roxanne Dunbar-Ortiz, further criticize this act by noting the discovery of gold in Georgia in 1829, the resulting gold rush, and the conditions under which Native leaders signed land cession treaties. Dunbar-Ortiz condemns the veneer of legitimacy that this act has taken on and believes the act to more accurately be understood as one of many examples of institutionalized violence against Native populations to force them to relinquish land, resources, family, culture, and more (Dunbar-Ortiz 2015).
Finally, in recent scholarship and in personal communication with the study team, criticism extends to the long tradition of European American scholarship on Native American removal in the West. The full horror of the theft of Native land and removal is regularly sanitized (Wendt 2020), and this sanitation is a continuation of the genocidal tendencies that accompanied European arrival and European American expansion (Dunbar-Ortiz 2015). The Indian Removal Act ultimately allowed for the ethnic cleansing of Native peoples in the Southeast for European American expansion (Hunt 2020).

The 1832 Treaty of Cusseta (Third Treaty of Washington) would result in the final loss of the Creek Nation’s land in Alabama and east of Mississippi River (Day and Klingelhofer 2019; Maloney 2017; Ramsey et al. 1995). Although treaty provisions granted Creeks the right to remain on individual farmsteads for five years (Haveman 2009; Ramsey et al. 1995; Smith 1992), white squatters and settlers continued to intrude onto their lands, move west, and prosecute the Creeks under state and local laws (Andrews, Collings, and Lee 2014; Ramsey et al. 1995). These consistent pressures eventually pushed Creek populations into Indian Territory in Oklahoma (Day and Klingelhofer 2019). The Creeks were forced out of Georgia in 1833 (Hammack 2008); by 1838, the removal was considered complete (Smith 1992).

In conjunction with the 1832 Treaty of Cusseta, a census of the Creek Nation listed 82 tribal towns, some of which shared the same name and some of which were “related,” having sprung from an original town (a mother town). Before being forced from their homeland, however, the Mvskokvlke ceremonial leaders gathered embers before they extinguished sacred fires in each etvlwv. This created a living connection between the Mvskoke homeland, society, and religion in the Southeast that survived Nene estemerkv (Road of Misery), also known as the Trail of Tears. These connections are maintained by the etvlwv in the West through today, such as through the layout of town plans, town names, ceremonial places (Harjo 2019; Perez 2019; Lee 2014), ceremonial practices, and important plants (New South Associates 2020; Freeman 2019). The Creeks encountered numerous hardships during their journey west, including federal government neglect and attack from hostile tribes. Some federal officials noted and complained to the secretary of war about the destruction of the Creek nation and way of life. Enclaves of Creeks, who had taken refuge among Cherokee people, were able to escape the removal by going to Florida, though they still struggled (Ramsey et al. 1995). Once the survivors of Nene estemerkv (Road of Misery) arrived in Indian Territory, there was still much suffering, illness, and death as they struggled to reestablish their tribal towns and way of life. As Melissa Harjo recounts, these trials include federal boarding schools where she and others were taught English, even though elder family members either did not speak English or refused to speak it. As has come down through oral histories, tribal elders encouraged their children and younger citizens to remember where they came from and honor their heritage (Harjo 2019).

**Macon Before the Civil War**

During the 1830s, the town of Macon continued to grow, seemingly overnight thanks to its prominence on the river for trading cotton to the East Coast (Bland et al. 2001), the first Darien-to-Macon steamboat that ran in 1833, and the arrival of steamboat companies in the town in 1835 (Hulett 2004). The river and surrounding wetlands also supported freshwater fisheries (Bland et al. 2001). A limited railroad was laid in the 1830s (Butler 1879), which competed with the Ocmulgee River for overland trade in cotton and other goods (Burns 2007).
In 1836, a railroad convention was held in Macon with designs for it to be a central rail hub, and two years later, the Monroe Railroad made its first run from Macon to Forsyth (Andrews, Collings, and Lee 2014). Other businesses opened and operated in Macon during this time, including the Georgia Female College (later known as Wesleyan College), which was established in 1836. The Georgia Female College was one of the first colleges in the United States to grant degrees to women (Andrews, Collings, and Lee 2014; Huff 2006; Anderson 2003). Additional colleges and schools were founded in the 1850s and after the Civil War, and in 1871 the town won the bid to move Mercer University to Macon (Anderson 2003).

In the early 1840s, more resources were diverted toward railroad construction than the maintenance of trade resources and channels along the Ocmulgee River (Hulett 2004). The movement of resources toward the railroad brought the Central Georgia Railroad, constructed in 1843. The installation of this railroad, which supported the growth of central Georgia’s agricultural system (Day and Klingelhofer 2019) and overland transportation (Burns 2007), damaged the Mississippian mound complex on the Macon Plateau (New South Associates 2018; Jones 2005). By 1847–1848, river transportation of cotton had nearly ceased (Hulett 2004), and Macon served as a central hub for railroad traffic (Andrews, Collings, and Lee 2014).

Abolitionists wanted the new regions to be free, and Southerners were against prohibition of slavery (National Survey of Historic Sites and Buildings Volume 1960). By the 1850s, however, the Southern slavery-based plantation economic system had slumped, and in 1860 Southerners felt that the US government, headed by newly elected President Abraham Lincoln (Hammack 2011), was hostile toward slavery and, by extension, their way of life. South Carolina became the first state to secede from the United States in 1860, and in 1861, Georgia joined South Carolina, Mississippi, Florida, and Alabama to establish a separate nation and leave the United States over the issue of slavery (New South Associates 2018; Confederate States of America 1860, 1861). The Civil War started in 1861, with 13 states making up the Confederate States of America (New South Associates 2018; Hammack 2011). The Civil War had various impacts on the Creek Nation and Creek peoples living in Indian Territory in the West. Some factions supported the Union, others supported the Confederate States, and yet other factions wished to remain uninvolved. These attitudes were partially based on which factions had resisted removal, which factions were more open to assimilation, and which factions took a position of neutrality. There was lingering hostility among these factions (Bales 1998; Scott 1996; White and White 1996). One faction of the Creek Nation made an alliance with the Confederate States of America, believing that should they win, the Confederate States of America would restore rights to their former lands (Ramsey et al. 1995). Major battles were fought in Georgia, and Macon thrived due to war industries located there and due to its railroad, which supported the Confederate army (New South Associates 2018; Hammack 2011).

The Civil War in the Ocmulgee River Corridor

From the 1830s through 1860s, the United States grew exponentially in land holdings to the west and in economic strength. During this time of rapid change, there was increasing debate surrounding slavery and whether it should extend into the new western territories.
Macon’s success would also make it a target of Union forces as part of the Atlanta Campaign and Sherman’s “March to the Sea” in 1864. In July 1864, Union Major General George Stoneman led a column of Union cavalymen south along the Ocmulgee River to join other Union forces. Stoneman continued south, though, hoping to capture Macon and liberate Union soldiers held at Camp Oglethorpe (NPS 2004), just south of Macon (New South Associates 2018) and Andersonville before joining with Sherman. The Samuel Dunlap house, built on the Ocmulgee Old Fields in 1856, served as Stoneman’s headquarters during his attack on Macon and the rail lines. One of Stoneman’s brigades, led by Lieutenant Horace Capon, rode from Macon to Griswoldville (approximately 10 miles from Macon), attacking the Macon and Western Railroad. One detachment uncoupled rail cars with supplies, set them on fire, and sent the cars down the rail toward Griswoldville. Meanwhile, the engine was stoked and sent, unmanned, toward Macon, where it crashed with a passenger train. No one was injured in the crash (New South Associates 2020, 2018; Wheeler 2007; Ritchie 1973). The Confederate troops in Macon had advance warning of Stoneman’s approach, however, and the ensuing battle that took place there is known as both “The Battle of Dunlap Hill” and “The Stoneman Raid” (NPS 2004, 2015). After the raids and battle, as Stoneman was trying to make his way back to Atlanta, he and his men were captured and imprisoned at Camp Oglethorpe and Andersonville. Stoneman was a prisoner until September 25, 1864 (New South Associates 2018).

Another skirmish occurred at Griswoldville on November 22, 1864. Federal forces under the command of Brigadier General Charles C. Walcutt made a demonstration toward Macon and encountered Confederate forces lead by Brigadier General Pleasant J. Philips and Major General Joseph Wheeler. Walcutt forced Wheeler’s calvary beyond Griswoldville and then retired to Duncan’s Farm where they withstood three Confederate charges until reinforcements arrived. The skirmish was considered a Federal victory as the Confederate forces fell back (Civil War Sites Advisory Commission 1993a, 1993b, 1993c). Several features associated with the small skirmish at Griswoldville and the defense of Macon contribute to the national register listing for Ocmulgee National Monument in 1966 (USAF 2016; Hawke 2010; Butler 1879).

Later in 1864, another skirmish, “The Battle of Walnut Creek,” took place on the Dunlap Plantation when Union forces, led by Brigadier General Judson Kilpatrick, attempted to burn down the Georgia Central Railroad trestle and repelled a Confederate attack. This skirmish was executed primarily to divert Confederate forces from blocking Sherman’s movement through Georgia (New South Associates 2020; Wheeler 2007; NPS 2004, 2015). The fighting on the Dunlap property was the only Civil War battle to take place near Macon (Wheeler 2007; NPS 2004; Ritchie 1973), and the Battle of Walnut Creek was the last (New South Associates 2020). Macon temporarily served as the capital of Georgia for one month in early 1865 (NPS 2004, 2015). Macon and the surrounding area surrendered to Union forces 11 days after Robert E. Lee’s surrender to Ulysses S. Grant (Wheeler 2007; NPS 2004, 2015; Butler 1879). Not long thereafter, Confederate President Jefferson Davis and his family were captured and sent as prisoners to Macon (Hammack 2011).

Reconstruction in the Ocmulgee River Corridor

After the Civil War, military troops occupied the former Confederate states until 1871 (Day and Klingelhofer 2019), which brought support for newly freed African Americans and concern among white Southerners (Manis 2004).
The end of enslavement and the Reconstruction period (1861–1900) allowed African Americans to build communities by finding lost family members, building churches, and founding businesses, social organizations, and political groups. During Reconstruction, the state governments in the South, dominated by Republicans, created public education systems, expanded tenant’s rights, funded improvements to public health concerns and infrastructure, and in some areas, passed laws forbidding racial discrimination in public accommodations (Downs and Masur 2017). Southerners who fought for the Confederacy were deprived of their right to vote, hold public office, or sit on juries, and others were imprisoned or executed as traitors (Hammack 2011).

After the Civil War, many plantation owners and farmers lost their land for failing to pay taxes (Hammack 2011), and agricultural production was halted, causing a ripple effect throughout the supporting industries. Disease, especially among poor and African American communities, ran rampant. Racial anxieties rose with race riots and white supremacy violence increased with terrorism and lynching (Manis 2004).

African Americans voted for the first time in Georgia in 1867 and elected African American representatives to the state senate and house. In 1868, under a new state constitution (Manis 2004) Henry McNeal Turner, who was born free and served as chaplain for the US Colored Troops during the Civil War (Downs and Masur 2017), was elected to the state legislature to represent Macon. By September 1868, however, the white members of the legislature voted to remove the African American members, including Turner, thus showing the tenuousness of African American political power in Georgia. This enfranchisement would continue to be challenged and eventually taken away as white, conservative Democrats regained control of the state government (Manis 2004).

During the 1868 presidential election, the Ku Klux Klan intimidated African Americans in Macon to prevent them from voting (Manis 2004). Republican candidate Ulysses S. Grant won the presidency, and Republican senators sought to amend the US Constitution to secure voting rights for African American men. Complex racial politics entered into debates on each amendment draft. The 15th Amendment, ratified by Congress on February 3, 1870, prohibited restrictions to vote based on race, color, or previous condition of servitude, but literacy tests, gender discrimination, religious affiliation, and property ownership remained legal as a means of denying access to voting (Downs and Masur 2017).

In Georgia, literacy tests, grandfather clauses, a cumulative poll tax adopted in the 1877 state constitution, and the institution of white-only primary voting (political parties did not fall under the jurisdiction of the 15th Amendment) were all deployed to limit African American men’s access to voting. In Macon, the white-only Democratic primary was adopted in 1901, and only about 6% of African American men voted in the 1904 election. Statewide, the number of African American voters dropped from 53% in 1876 to 8% by 1900 (Manis 2004). Coupled with this disenfranchisement, there was a rise in political populism and the stoking of fear that African Americans would control Georgia. Interracial alliances quickly broke down in the face of the virulent racial stereotyping and propaganda, and white supremacist ideology eventually dominated in the South (Downs and Masur 2017).

From the beginning of the Civil War, as enslaved people and their families fled north, the United States was concerned with replacing the slaveholding labor system. Formerly enslaved people hoped to own and farm land, but plantation owners resisted this, wanting to grow cash crops, like cotton, on large tracts of land and maintain their economic strength.
Near the end of the Civil War, large numbers of formerly enslaved people in Georgia and elsewhere were able to acquire small plots of land through Major General William Sherman’s Field Order No. 15. Many, however, resumed work for white landowners (Downs and Masur 2017), and cotton agriculture and industry eventually resumed (Wheeler 2007) under a system of sharecropping by both African American and white tenants (Hammack 2011). Lumber was also in high demand immediately after the Civil War, and the longleaf pine that grew in the Ocmulgee River basin, especially around Hawkinsville, was sent down the river to mills (Hulett 2004).

After the Civil War, railroad companies expanded and, in 1873, the Central Georgia Railroad relocated a track of the Macon, Dublin & Savannah Railroad to its present location, damaging the Funeral Mound located on the Macon Plateau and unearthing burials and artifacts (Wheeler 2007; Butler 1879). The Georgia Southern and Florida Railroad also planned an expansion to connect Macon to Perry via a train station at the farm community of York, later renamed Wellston. Wellston continued to be supported by the cultivation of pecans, peaches, corn and by dairy products. Wellston would later become the site of Robins Air Force Base, which had enormous impacts on the local economy (Head 2005).

The rail expansion encouraged further industrial development. Cotton-processing textile mills such as the Bibb Manufacturing Company, established in 1876 (US Tariff Commission 1971), expanded the cotton economy. Expansion of the textile industry further prompted demand for bricks (Moffson and Johnston 2002), and Macon benefitted, as it was located in an area with clay deposits suitable for brick manufacture (Brockington and Associates 1999).

In 1859, Macon devoted 10 acres of public land at “Camp Oglethorpe” for continued brick yard purposes as had been the land’s use (Moffson and Johnston 2002; Bland 2001) before using it to imprison Union officers in 1864 (New South Associates 2018).

In 1877, the Cherokee Brick and Tile Company (in operation today) purchased land to mine clay deposits in Macon. The clay deposits were near railroad lines, allowing the company to ship its products efficiently. By the 1890s, Bibb County was known for having the best clay deposits in the state, and the area attracted geological survey and more clay industries to the area (Moffson and Johnston 2002). Some of the mined clay deposits are located in the southeast portion of Ocmulgee Mounds National Historical Park, covered by the Walnut Creek wetlands (Wheeler 2007), and others are located to the west of the Ocmulgee River within the Ocmulgee Old Fields Traditional Cultural Property (Brockington and Associates 1999). Fertilizer (guano) was an additional resource that supported the Macon economy, and the Ocmulgee Old Fields Traditional Cultural Property area was used for brick and fertilizer factories and as a dairy farm. These industries impacted the archeological sites on the Macon Plateau and along the Ocmulgee River (Wheeler 2007).
In Macon and Hawkinsville, an important trade center and river port since the 1830s, supplies, raw materials, and processed goods were traded to the East Coast via boats and barges (Bland et al. 2001) on the Ocmulgee and Altamaha rivers. The arrival of the Macon and Brunswick Railroad in 1868 further bolstered Hawkinsville as a regional trade center, with the city now being able to access new interior markets for cotton and supporting the manufacturing of textiles, cotton seed oil, lumber, and fertilizer. By the 1870s, there were wooden warehouses and cotton sheds lining the riverfront as a result of the prosperous river-borne trade, but a fire in 1879 destroyed many of these buildings. Merchants rebuilt using brick in the 1880s, and many of these brick buildings survive today (Moffson and Ciucevich 2004). By the end of the century, though largely a port town, Hawkinsville also began to support equestrian demonstrations such as harness racing (Remler 2005).

In 1895, botanist and taxonomist John Kunkel Small visited the Ocmulgee River corridor north of Macon and collected the type specimen for the Ocmulgee skullcap (Scutellaria ocmulgee). Small wrote the first description of this plant in 1898. A member of the mint family, Ocmulgee skullcap is a rare herbaceous perennial plant, found only in the Ocmulgee River (Georgia) and Savannah River (Georgia and South Carolina) watersheds (Fish and Wildlife Service 2020; Small 1898).

**Growth and Depression Period (1900–1941)**

Georgia saw an expansion of manufacturing industries during this period, which brought more people to urban areas. The growth in population led to the creation of new counties, as well as new building projects for the towns along the Ocmulgee River to house the increasing industrial businesses, civic institutions, and growing population.

The Great Depression had widespread impacts in the South, and New Deal programs, resisted by the Georgia state government, brought jobs to many of those who were out of work. The New Deal archeological investigations on the Macon Plateau led to the creation of Ocmulgee National Monument and dramatically improved the understanding of the precontact Southeast, which is still being studied today. The entrance of the United States into World War II brought new jobs to the area in support of military operations. Throughout these variations in economic prosperity, African American citizens and white citizens lived in separate worlds due to legal segregation and Jim Crow laws.

**Growth**

Cotton continued to be the backbone of the Southern agricultural economy during Reconstruction, including in towns located along the Fall Line such as Macon and Hawkinsville. The Ocmulgee River corridor saw growth and expansion of textile mills such as the Henry Cotton (later Hawkinsville Cotton) Mill in 1904 and supporting industries. New industries were supported by the expansion of the railroad through the 1890s and early 1900s (Hammack 2011; Moffson and Ciucevich 2004). By 1909, due to the prevalence of railroad commerce, steamboat traffic to Macon ceased (Hulett 2004). Commercial traffic and trade on the Ocmulgee River, primarily for shipping pine timber, continued to decline until it ended in 1944, as large timber companies depleted the pine forests (Heart of Georgia Altamaha Regional Commission 2011; Hulett 2004). At the same time, the municipal government acknowledged the importance of the Ocmulgee River and its natural resources, and there was concern about increased pollution from the growing population and businesses (Hulett 2004; Lamar 1944). By 1913, Bibb County passed legislation limiting discharge of sewage into the river (Hulett 2004).
Macon’s economic growth, spurred by the railroad, included efforts to annex east Macon, now the Fort Hill Historic District, into city limits (Curtis 1993b). In Hawkinsville, the prosperity of the town is reflected in the construction of multistory commercial and civic buildings downtown (Moffson and Ciucevich 2004). The Southern economy, despite this growth, still relied on low-wage workers (Downs and Masur 2017). Cotton prices declined globally throughout the early 20th century (Downs and Masur 2017), and cotton production plummeted in the 1920s due to devastation caused by the boll weevil. Cotton never recovered its economic dominance following the Great Depression (New South Associates 2018; Burns 2007; Joseph, Hamby, and Long 2004; Moffson and Ciucevich 2004).

The clay resources along the Ocmulgee River that provided raw materials for brick making also supported the growth of a concrete industry. Forested areas around Macon supported timber harvesting, lumber milling, turpentine, and rosin and gum industries from the late 1880s to the 1920s (Hammack 2011; Hulett 2004). The population and economic growth that resulted from these industries also led the State of Georgia to look at the Ocmulgee River for generating electric power and supplying water for homes and businesses. The Lloyd Shoals Dam built in 1920 in Butts County, upriver from Macon (Hulett 2004), provided both.

In Hawkinsville, the importance of timber and lumber was established by 1926 with three lumber companies operating out of the town (Moffson and Ciucevich 2004). That same year, Hawkinsville was chosen as a winter training venue for equestrian harness racing (Remler 2005). Changes in the economic base along the Ocmulgee River and elsewhere in Georgia resulted in a population shift toward urban areas and an increase in industry and manufacturing (Joseph, Hamby, and Long 2004).

The population shift additionally increased racial tensions and violence in urban areas (Manis 2004). These racial tensions were exacerbated with the late 19th-early 20th-century creation and consolidation of the Lost Cause mythology and ideology in literature, film (e.g., Birth of a Nation in 1915), monuments (Anderson and Nail 2003), anniversaries, and festivals. Lost Cause mythology developed out of the dramatic changes that occurred during the Reconstruction period, which venerated the Old South even though it accepted the United States’ victory over the Confederacy. In this mythology, Lost Cause proponents praised the honor of the Old South but held that the Confederacy was doomed and loss to the United States inevitable. Proponents portrayed Reconstruction as corrupt. In addition, Lost Cause proponents created a false narrative of mild slave owners, downplayed the horrors of slavery, and praised Confederate soldiers’ actions while obscuring the cause and nature of the Civil War. By the 50th anniversary of the Battle of Gettysburg, the Lost Cause mythology had reached a national consciousness, and by the 100-year anniversary the mythology appeared in many public venues, including the National Park Service (Downs and Masur 2017).

As racial segregation was law and custom in the South, the African American entertainment industry emerged and was directed toward a white audience, and African American playhouses and theatres increased during the 1910s and 1920s. One African American-owned theater was the New Douglass Theatre, established in Macon in 1921 by Charles H. Douglass. Douglass also owned and operated the Ocmulgee Park Theater from 1904 to 1906 (Ellerbee 2004). The first Douglass Theatre, opened in 1912, operated out of the Colonial Hotel, the only hotel for African American guests in Macon.
The New Douglass Theatre opened adjacent to the Colonial Hotel in 1921 and operated until 1973; the city of Macon purchased it in 1978. The Douglass Theatre featured acts such as blues singers “Ma” Rainey and Bessie Smith, jazz performers Cab Calloway and Duke Ellington, comedians such as Butterbeans and Susie (Ellerbee 2004), and later, rhythm and blues singer Ray Charles (Emerson 1993).

In 1912, the Georgia General Assembly established Bleckley County (Bleckley County, Georgia 2020) and the county seat was established in Cochran, (formerly called Dykesboro) in the 1830s. “Cochran” was selected to honor Judge Arthur E. Cochran, a former president of the Macon and Brunswick Railroad (Anderson and Nail 2003), which ran through nearby Hawkinsville (Moffson and Ciucevich 2004).

When the United States entered World War I (1914–1918) in 1917, Georgia was a major manufacturing supplier for the war effort as well as the location of military installations (Joseph, Hamby, and Long 2004). One of these installations was Camp Wheeler, named after Joseph Wheeler, a Confederate lieutenant general and located approximately 6 miles southeast of Macon in portions of Bibb and Twiggs Counties. The camp was established in 1917, on over 21,000 acres of land including Holly Bluff, the home of writer Harry Stillwell Edwards. The camp was intended to be temporary training camp for army National Guard units in the federal service and comprised tents and a cantonment area. The camp was in operation 1917–1919, and at the end of the war the camp was dismantled and the land returned to its owners. Part of this camp site became the Herbert Smart Airport. The second Camp Wheeler opened in 1940 on over 14,000 acres of land and was used as a training camp for infantry replacement troops (to replace combat casualties), a hospital, and a prisoner-of-war camp during World War II.

The camp was closed in December 1945 and declared excess in January 1946. After the war, the camp was again dismantled and the site returned to its owners. There were decontamination operations in 1946, 1947, and 1949 to remove munitions and explosives. More munitions and explosives were found, however, after these decontamination operations and continued to be encountered during US Army Corp of Engineers inspections until 1966 (Georgia Historical Society 2014; US Army Corps of Engineers 2009).

The postwar period brought new social changes for African Americans and other minority veterans fighting for democracy and equality at home and subsequent white supremacist responses of increased racial violence and lynching (Manis 2004).

Racial segregation, despite the achievements gained by African Americans during Reconstruction, remained both law and custom in Georgia and the southern United States. The Supreme Court case, Plessy v Ferguson (1896) legally affirmed racial segregation at the federal level in public education (Salvatore et al. 2000). The southern United States, furthermore, remained behind other regions in terms of spending on social welfare programs and education, leading to low literacy rates (Downs and Masur 2017). In Georgia, remnants of segregation and segregated public spaces in the late 19th and early 20th centuries can be found in Cochran (Anderson and Nail 2003), Hawkinsville (Moffson and Ciucevich 2004), and east Macon. Segregation of public spaces structured the East Macon Historic District and Fort Hill Historic District that preserve residential, commercial, and community buildings dating from about 1870 to 1941. The southern part of this district, historically occupied by white citizens, features Fort Hawkins School, built in 1920, which was used to educate white students.
The area also featured a 1930s reconstruction by the Daughters of the American Revolution of the blockhouse of Fort Hawkins, an auditorium built by the Bibb Manufacturing Company for textile mill workers’ use, and white churches. The north side of the Fort Hill district was occupied by African American citizens and features the M.M. Burdell School, built in 1936, and historic African American churches (Curtis 1993a, 1993b).

The Great Depression

The Great Depression began with the crash of the US stock market in 1929, bringing unemployment, poverty, and suffering to the entire nation. In the South, farms were again lost (New South Associates 2020), and the price of cotton plummeted (Mazzari 2004). People migrated to urban areas, seeking manufacturing jobs. To ease suffering and restore economic stability, state and national recovery plans were enacted (New South Associates 2018; Hammack 2011). One such plan, the Agricultural Adjustment Act, sought to limit farmland planted in cotton in order to drive up prices. For a period, this was successful, (Mazzari 2004), but agriculture and industry had to make adjustments during this difficult time (Moffson and Johnston 2002). In Hawkinsville, for example, the major timber and lumber companies operating in the town went out of business by the 1930s. Other businesses had to diversify their operations to survive, and as a result, peanut and pecan agriculture and industry came to dominate the local economy through the 1950s (Moffson and Ciucevich 2004).

In 1933, President Franklin Delano Roosevelt announced his New Deal economic policy. The federal government established programs to alleviate economic depression and strengthen the economy by creating jobs for federal work projects and through other means (New South Associates 2018).

These programs touched nearly all economic sectors and facets of American life and sought to improve living conditions for rural populations. The New Deal programs supported labor unions, a higher living wage, and African American workers, which threatened low-wage private business practices (Mazzari 2004) and Jim Crow (Zainaldin 2016).

President Roosevelt’s programs met resistance from politicians such as Georgia Governor Eugene Talmadge, factory and mill owners (Zainaldin 2016), and local communities where segregation and racial discrimination were entrenched. During Talmadge’s two terms as governor, the State of Georgia tried to subvert the New Deal programs. Talmadge’s increasingly hostile rhetoric included labeling the programs as communist and vetoing Georgia’s participation in the new Social Security Administration. Former House Speaker E.D. Rivers succeeded Talmadge as governor in 1936 and supported the New Deal programs. However, by the end of the decade, Georgia was once again moving away from the programs (Mazzari 2004).

The New Deal and Archeology

Interest in preserving the Macon Plateau Mounds began during the 1920s when Macon Attorney General Walter A. Harris wrote to the Smithsonian Institution and the Bureau of American Ethnology about archeological resources in the region. In 1933, Harris, Dr. Charles C. Harrold, and Linton Solomon persuaded the Macon Junior Chamber of Commerce, the Society for Georgia Archaeology, and the Macon Historical Society to acquire the site. They also sought labor and funds from President Roosevelt’s New Deal programs (Wheeler 2007; Marsh 1986a, 1986b). Large-scale professional archeological efforts at Ocmulgee began during the Great Depression in 1933 and continued until 1941 under the direction of the National Park Service (Day and Klingelhofer 2019).
These New Deal excavations “blew open the doors to understanding the Mississippian past” (Pauketat and Alt 2015).

Funding came from New Deal programs, and the newly hired men and women received on-the-job training in excavation and artifact identification and cataloging. Professional archeologists, such as Dr. Arthur R. Kelly of the Smithsonian Institution, as well as James A. Ford, Jesse D. Jennings, Gordon R. Willey, and Charles H. Fairbanks, trained and supervised the men and women employed (Andrews, Collings, and Lee 2014; Marsh 1986a, 1986b). The sustained archeological effort changed the way the field of archeology was practiced (Day and Klingelhofer 2019) and launched the careers of Ford, Jennings, Willey, and Fairbanks, who became prominent archeologists (Andrews, Collings, and Lee 2014). The history of the archeological research at Ocmulgee itself is of significance (Day and Klingelhofer 2019), as the efforts provided one of the first examples of the use of archeology as an independent window into the American past (Waselkov 1994).

More than 800 individuals from the Civil Works Administration, Works Progress Administration, Civilian Conservation Corps, and the Federal Emergency Relief Administration) excavated at the Ocmulgee site (Andrews, Collings, and Lee 2014). The excavations resulted in the largest archeological excavation in American history, recovering more than 2 million artifacts during the entire endeavor, which spanned the years 1933–1941 (Day and Klingelhofer 2019). These early archeologists examined additional sites along the Ocmulgee River valley in 1935–1938; however, there were no comprehensive reports produced (Hammack 2008). Excavations also took place across Georgia (Southeast Archeological Center 2020; Halchin 2015a, 2015b; Walker 1971), at Fort Hawkins and Brown’s Mount (Wheeler 2007).

The excavations documented many of the precontact-type-sites and ceramic typologies for the southeastern United States, such as the Swift Creek site, the type-site for the Swift Creek culture. The Swift Creek site was excavated by an all-female African American field crew from the Works Progress Administration (Andrews, Collings, and Lee 2014; Marsh 1998) as was the Irene Mound (outside of the study area) (Roller and Moyer 2020; Marsh 1998; Claassen 1993). The inclusion of African Americans in the New Deal excavations is significant, especially since Georgia Governor Eugene Talmage (1932–1937 and 1941–1943) opposed New Deal programs and stoked fears about African American workers earning more than white workers, communism, and the overreach of federal control (New South Associates 2018).

With time, the federal and state agencies involved shifted, as did the focus of their work, from excavation to laboratory work and to a new emphasis on visitor facilities, as the public donated land to the federal government and lobbied for the creation of a national park (Day and Klingelhofer 2019; Andrews, Collings, and Lee 2014; Lyons 1996; Marsh 1986a, 1986b; Lyon 1982).
Ocmulgee National Monument was authorized by Congress on June 14, 1934, and established by presidential proclamation on December 23, 1936. Following the establishment of the park, the federal and state agencies built roads, the visitor center, and museum, reconstructed the Earth Lodge, planted vegetation, constructed fences, built shelters and footbridges, and continued to perform laboratory work on the artifacts (Andrews, Collings, and Lee 2014; NPS 2014; Wheeler 2007; Lyon 1982). With the outbreak of World War II, additional construction and improvements at the monument were delayed (Wheeler 2007).

The work of Kelly and his colleagues at Macon did much to dispel the notion that historic-period tribes were less than legitimate subject for archeological study (Waselkov 1994). They were also able to dispel some myths about the mounds, such as that they were built by the “lost colony” of Roanoke (Marsh 1986b). The archeologists digging at Macon took a long view of history and attempted to understand the entire continuum of human occupation (Waselkov 1994). In fact, one of the enduring goals for Ocmulgee Mounds National Historical Park and the Ocmulgee River valley is identifying the various peoples who lived in the area (Andrews, Collings, and Lee 2014). This period of cultural resources inquiry and conservation extended to natural resources along the Ocmulgee River, and the Piedmont National Wildlife Refuge was established in 1939, protecting the upland pine forests and the habitat of various species (Hulett 2004).

After the New Deal excavations ceased in 1941, there were no other further large-scale excavations of the Macon Plateau and surrounding area. Excavations in subsequent years have been driven predominantly by federal compliance associated with construction projects. These projects, however, continue to attest to the importance of archeological deposits in the area (Andrews, Collings, and Lee 2014).

**World War II to Present Period (1942–Present)**

The military industry that arrived in the Ocmulgee River corridor as a result of World War II brought an additional increase in population and support industries. The river corridor experienced economic growth and vast cultural changes with the modern civil rights and Native rights movement groups, and individuals lobbied for constitutional equality (Camarillo et al. 2000; National Museum of the American Indian 2009), many as a result of their military experience. Infrastructure projects supported continued economic and population growth as well as increasing tourism to the river corridor, and these infrastructure projects also resulted in the discovery of new archeological sites. The Ocmulgee River corridor has experienced vast changes in the use of its resources and in the life and culture of the humans who occupy and visit it.

**Growth During and After World War II**

World War II accelerated economic, political, and social change in the United States (Camarillo et al. 2000). In Georgia, the Macon Chamber of Commerce and the mayor, with the support of US Congressman Carl Vinson, sought to bring the defense industry to the area. In 1941, the US War Department announced it would build an aviation depot, Robins Field (Robins Air Service) near the train station of Wellston, which was renamed Warner Robins in 1942 (Head 2005). Warner Robins and the surrounding area boomed from the federal resource influx at Robins Air Service as the United States entered World War II (1939–1945) in 1941 (Joseph, Hamby, and Long 2004). The installation was renamed Robins Air Force Base in 1947 (Hammack 2009; Head 2005). Macon began to recover throughout World War II, and Warner Robins continued to expand alongside Robins Air Force Base.
The military installation brought additional manufacturing jobs, increased the population, and boosted the local and state economy (Joseph, Hamby, and Long 2004) as a more racially, ethnically, and gender-diverse workforce, supported the war effort (Camarillo et al. 2000). The subsequent military threats and wars continued to create jobs in Warner Robins and attract technology and aerospace companies such as Boeing. Today, Robins Air Force Base is the largest industrial complex in Georgia (Head 2005).

By the 1950s, the per capita income had increased, and more people were employed in manufacturing than agriculture (Joseph, Hamby, and Long 2004). Manufacturing accelerated the use of traditional local resources, including lumber, pulp, and clay, specifically kaolin (Anderson 2003), which also has cultural value to the Seminole Tribe of Florida (Brockington and Associates 1999). Agriculture, which no longer relied on sharecropping, included tobacco, poultry, soybeans, and the continued increased production of peanuts and pecans (Anderson 2003).

Regional development continued through the 1950s and the 1960s, and archeological investigations took place as a result of compliance projects (Andrews, Collings, and Lee 2014) as Macon sought highways to connect it to other areas. Plans for Interstate 16 (I-16) to intersect with Interstate 75 (I-75) (Anderson 2003) were drawn up in the late 1950s, and originally the road was going to slice through Ocmulgee National Monument. In 1966, as a result of the compliance, mitigation, and excavation efforts associated with the installation of I-16, the National Park Service’s research center known as the Southeast Archeological Center (SEAC) was established (Andrews, Collings, and Lee 2014).

By the time the interstate was constructed in the late 1960s, the road ran parallel to the park boundary, separating the park from the Ocmulgee River (Wheeler 2007). During the construction of I-16, construction workers encountered archeological deposits such as burials and unearthed additional evidence for Paleoindian occupation of the area (Andrews, Collings, and Lee 2014; Burns 2007). The archeological center was later moved to Tallahassee, Florida, in 1972 (Wheeler 2007). Local citizens of Macon protested the move of the Southeast Archeological Center and the artifacts from the New Deal excavations (Marsh 1986a).

The Civil Rights Movement

In Macon and elsewhere in Georgia during the 1950s, racial segregation was institutionalized. Segregation began to be dismantled through demonstrations, such as the bus boycott in Montgomery, Alabama, in 1955, and legal victories, such as *Brown v. Board of Education* in 1954, which desegregated public schools. There was also violence and intimidation as white people resisted integration (Camarillo et al. 2000). In Macon, white resistance to integration was moderate as compared (Crawly et al. n.d.) to elsewhere in the country, though the Ku Klux Klan operated in the area and violence did occur (Manis 2004; Brayan et al. n.d.). The changes in population brought about by World War II and the economic boom supporting Robins Air Force Base allowed Macon to end *de jure* segregation more easily than elsewhere in the South (Anderson 2003).

Desegregation also impacted entertainment in Macon, with youths breaking racial barriers to attend concerts. As a result, Macon found itself situated at the crossroads of soul and rock and roll music (Anderson 2003; Emerson 1993). The Douglass Theatre, having been in operation since the 1920s, was in competition with other African American theaters in Macon such as the Macon City
Auditorium, built in 1925 (McKay 1971b), and the Roxy in the 1940s. Attendance at the Douglass Theatre began to drop in the 1950s (Ellerbee 2004).

In 1958, a local African American disc jockey named Hamp Swain introduced a live program and talent show called “The Teenage Party” on local radio station WIBB (WMAZ 2018; Ellerbee 2004). This helped launch the careers of Macon artists such as Little Richard, discovered first by Sister Rosetta Tharpe in 1947 at the Macon City Auditorium (Ruggieri 2020b); Johnnie Jenkins; Otis Redding, who moved to Macon as a child; and James Brown, who recorded in Macon in 1955 (The Augusta Chronicle 2011; Ellerbee 2004). The widespread popularity of these artists allowed for cultural crossover and supported desegregation and the growing music scene (Anderson 2003).

As Manis (2004) notes, African American citizens of Macon negotiated with the white elected officials for equality and were often successful, leading to fewer demonstrations as opposed to elsewhere in the South. Sometimes, however, demonstrations were necessary. Civil rights victories occurred in Macon as civil rights activists employed tactics that had proven successful elsewhere in the South. One such example was the Macon bus boycott in 1962 which sought an end to segregation on city buses, like its predecessor in Montgomery, Alabama, in 1955. Inspired by contemporaneous national action without national civil rights organizations’ support (besides a local branch of the National Association for the Advancement of Colored People (NAACP)), local African American citizens secured victories for civil rights in Macon such as integrated lunch counters, schools, universities, public parks, and recreation spaces, and improved salaries and living conditions (Manis 2004; Crawley et al. n.d.).

While Brown v. Board of Education desegregated schools de jure in 1954, which desegregated public schools (Camarillo et al. 2000), Macon did not integrate its public schools until 1964 (Honaker 2017). In 1964, the Civil Rights Act was passed, and it prohibited tactics designed to limit voting, guaranteed racial and religious minorities equal access to public accommodations, and outlawed job discrimination based on race, color, religion, sex, or national origin (Camarillo et al. 2000).

One civil rights loss in Macon, however, was Baconsfield Park, which had been left to the city of Macon in 1914 by segregationist Senator Augustus Octavius Bacon. As discussion on integration of the park grew, the debate led to court battles—even a Supreme Court case (Evans v. Abney (1970)). The court ruled in favor of Abney, and the park was returned to Bacon’s heirs, making it private property and not subject to integration. Despite additional challenges to save the park, the park was lost to development in 1972 (Barron et al. n.d.).

By the late 1960s, desegregation and the Civil Rights Movement again impacted the music scene in Macon as Phil Walden, former manager of Otis Redding, built a powerful rhythm and blues booking agency in 1967 and the Capricorn record label (Capricorn Sound Studio) in 1969. Walden’s company represented Percy Sledge, Sam and Dave, and Joe Tex and recorded Marshall Tucker, Wet Willie, and the Allman Brothers at the Capricorn Studio (Emerson 1993). Members of the Allman Brothers band rented a home in Macon from 1969–1973, which today serves as a museum, and they are considered founders of the “southern rock” genre (The Big House 2020) for which, in the 1970s, the Capricorn Sound Studios was known (Ruggieri 2020a). Capricorn Sound Studios still stands in Macon, and there is work underway with Mercer University to restore the historic recording studio, create rehearsal rooms, and record new performances (Ruggieri 2020a).
Economic Changes

Though only about 50 river miles apart, the economies of Hawkinsville and Macon began to diverge through the 1960s into the 21st century. During the 1960s and 1970s, Hawkinsville’s economy was still mainly supported by agriculture and industry of peanuts, pecans, and cotton (Moffson and Ciucevich 2004), as well as paper. Harness racing, established in Hawkinsville at the turn of the century, continued to grow in importance, and in 1977 the Lawrence L. Bennett Harness Horse Training Facility opened. The exhibition races in Hawkinsville mark the beginning of the harness-racing season across the country (Remler 2005). By 1980, however, several businesses closed and Hawkinsville lost 17% of its population (Moffson and Ciucevich 2004).

Macon, meanwhile, saw a dramatic population increase by annexing part of its suburbs into the city in 1960. Its economy began to shift from agriculture and industry toward retail, with the opening of a shopping mall in 1975; healthcare and engineering, due in part to Robins Air Force Base; finances; insurance; and tourism. The 1960s also saw the foundation of new colleges in Macon, such as Central Georgia Technical College and Macon State College, which impacted the local economy, population composition, and cultural practices (Anderson 2003).

During these dramatic cultural and economic changes, Ocmulgee National Monument continued to receive support for improvements and sought to create stronger bonds with the local community. Funds for the completion of the museum and an administrative building were acquired in 1950, and the project was completed in 1951. Native Americans and the local community were invited to a ceremony and festivities in a dedication program for the museum and administrative building (Marsh 1986a).

In 1952, a two-day American Indian Festival was held at Ocmulgee National Monument, and 50 Creek Indians came from Oklahoma for the event, which included a stickball game between citizens of the Creek and Cherokee tribes, a concert, a parade, and craft demonstrations. Attendance at both the dedication ceremony and festival was high and both events were considered a success (Andrews, Collings, and Lee 2014; Marsh 1986a).

Decades later, in 1972, a Creek Indian Week festival at the national monument celebrated the heritage of Macon. There was a parade, displays, demonstrations, and performances (Wheeler 2007). There was also an attempt in that same year to support the relocation of Creek Indians to Macon and the creation of a living history program at the national monument (Andrews, Collings, and Lee 2014). The Macon Chamber of Commerce encouraged local business to provide jobs for Creek Indians, and Mercer University offered 10 full-time scholarships for study at their school. The US Bureau of Indian Affairs also provided transportation funds and grant money for a Creek-operated gift shop at the park. A few Creek Indians from Oklahoma temporarily moved to Macon, but the relocation program ultimately failed (Marsh 1986a).

In the 1970s and 1980s, archeologists with the University of Georgia, whose anthropology program was created as a result of the New Deal excavations, focused on cultural resource management. In the 1980s and 1990s, professional archeologists not affiliated with the University of Georgia pushed for the creation of a statewide archeology program to protect, manage, and research the terrestrial and underwater archeological resources in Georgia (Burns 2007).
There was also an effort to recognize the architectural history of Bibb, Bleckley, Houston, Pulaski, and Twiggs Counties, with 57 nominations of historic districts and individual buildings to the National Register of Historic Places from 1970 to 1980. From 1981 to 2000, only 19 districts or properties were listed in the national register. Restoration also began on properties such as the Douglass Theatre (Ellerbee 2004; Anderson 2003).

In the 1980s and 1990s conservationists engaged in more activism to create greenways along the Ocmulgee River by linking protected wildlife areas and cultural sites from Jackson to Warner Robins. Other conservation projects included protecting the Ocmulgee tributaries and the hardwood and tupelo gum swamps (Hulett 2004). In 1989, the Bond Swamp National Wildlife Refuge was established to protect the ecosystem of the Ocmulgee River floodplain, a mixture of habitat types used by Paleoindian peoples up to the modern day (USFWS 2018). The refuge opened for public recreational uses in 2000 (USFWS 2002).

For properties managed by the Georgia Department of Natural Resources, Ocmulgee Wildlife Management Area was acquired in four separate transactions (deeded and purchased), beginning in 1989 and most recently occurring in 2006 (Bond et al. 2010). The Oaky Woods Wildlife Management Area was established in 1966 and has been managed by a variety of forest product corporations. The Georgia Department of Natural Resources acquired portions of Oaky Woods in five separate transactions beginning in 1995 and ending most recently in 2010 (Bond et al. 2014). The Echeconnee Creek Wildlife Management Area was formed in 1996 and subsequent land swaps in 2006 and 2018 have led to its current size (Bond, pers. comm., 2020).

In 1997, the Federal Highway Administration submitted a determination of National Register of Historic Places eligibility to the Georgia State Historic Preservation Officer for the Ocmulgee Fields Traditional Cultural Property as part of the Eisenhower Parkway Extension project (Studstill 1997). The proposed boundaries for the property were based on a combination of Muscogee (Creek) oral tradition (expressed in Tribal Resolution 95-10 and other documents), early historic accounts by Bartram and Hawkins, the Macon Reserve East/Treaty of 1805, and archeological data. The Creek consider the Ocmulgee Fields Traditional Cultural Property to be their place of origin and the site of their first permanent settlement—the “cradle of Creek Confederacy” (Bowen 1997).

The keeper of the national register (keeper) agreed with the north and south boundaries of the Ocmulgee Fields Traditional Cultural Property but requested additional information concerning the east and west boundaries (Andrews 1997). In 1999, additional information was submitted to the keeper (Brockington and Associates 1999; Dreihaup 1999), and the boundaries and eligibility were formally established. A request for determination of eligibility was signed by the keeper of the national register that same year. The reviewer’s comments in the determination of eligibility notes that the area between the Central City Park and the Rocky/Tobesofkee Creek drainage lack integrity due to modern development. The Muscogee (Creek) and Alabama–Coushatta tribes have indicated that the loss of integrity is only temporary and that the integrity would return once industrial activities cease (Harper 1999).

The Ocmulgee Fields Traditional Cultural Property was not ultimately listed in the national register, as additional information was needed about other cultural resources within the boundary that overlapped, coexisted with, or could have caused the boundary to potentially expand.
Other cultural resources include the Central City Park, the Rocky/Tobesofkee Creek drainage, the undeveloped clay reserves of Cherokee Brick and Tile, and the buildings of the Burns Brick Company. Upland areas in Bond Swamp National Wildlife Refuge were also identified as providing possible evidence for the use of chert outcroppings and lithic manufacture (Shull 2000). Significant archeological sites were likely present within the Ocmulgee Old Fields Traditional Cultural Property and more information was needed to determine if it was eligible as an archeological district (Harper 1999).

In the course of site visits, tribal consultation, and review of cultural resource reports, the keeper identified areas and themes for additional consideration with the Ocmulgee Fields Traditional Cultural Property and the Ocmulgee River valley at large. These themes include the foundation of Macon, the history of railroads, the Civil War, “Art Moderne” architecture, clay mining, and brick making. Specific areas identified in Macon include the Central City Park (1) as the location of important fish runs and of the last great Muscogee (Creek) assembly (1817) before their removal to the West, (2) as important to the foundation of Macon (Shull 2000), and (3) as a historically popular venue for public entertainment (McKay 1971a). The park also contains portions of archeological sites, which warrant further study, and a bandstand (Shull 2000) listed in the national register in 1972 for its architecture and historical association with ex-Confederate President Jefferson Davis and President William H. Taft (McKay 1971a).

Tribal consultation identified the Rocky/Tobesofkee Creek drainage area as a location once containing traditional towns of the Muscogee (Creek) people and a significant settlement location for ancestral groups (Brockington and Associates 1999).

Other documentation submitted to the keeper indicated that the area was remembered in Creek oral histories, and the excerpts of Colonel Benjamin Hawkins’s diary identified it as “old fields” (Hawkins 1916; Shull 2000). An archeological site is also in this area, and artifacts continue to be recovered in the drainage (Shull 2000). It may be the case that branch towns or isolated Creek farmsteads were located in the area (Brockington and Associates 1999).

Clay resources have been mined in Georgia for centuries; as of 2000, the Cherokee Brick and Tile Company, established in 1877, produced 170 million bricks per year that contributed to numerous buildings in Macon (Moffson and Johnston 2002). An archeological compliance investigation in 1999 on land owned by the company identified nine precontact sites with cultural components dating from the Early Archaic to the late Mississippian periods. The sites included a Lamar-period mound complex. Seven of the nine sites were identified as eligible or potentially eligible for listing in the National Register of Historic Places, including the Adele Mound (Keith 2004; Bland et al. 2001). Thus, the clay reserves at Cherokee Brick and Tile, its associated buildings, and the precontact elements present on the company’s property all speak to the rich history of Macon and the Ocmulgee River corridor.

Interest in the history and heritage of Macon has been growing over the last 20 years. The Ocmulgee Archaeological Society was established in 2003 to organize archeological and educational events in Macon and the surrounding area. Volunteers from local communities, historic societies, and members of the Society for Georgia Archaeology promote and run these events. Though not much archeological work has been conducted beyond compliance projects, the Ocmulgee Archaeological Society instituted the Ocmulgee River Basin Archaeological Project, the first regional investigation in the Upper Ocmulgee River valley since the New Deal archeological research.
As of 2008, the project had been able to identify artifacts in local private collections and identified more than 30 sites previously unrecorded that range in date from the Paleoindian to the postcontact periods (Hammack 2008).

The continued expansion of highways and roads in the area has also led to discoveries of forgotten cemeteries, such as the discovery of an African American cemetery in 2008 along the Sardis Church Road, which served an African American community of possibly enslaved and free individuals and their descendants. The human remains and associated mortuary material were relocated to the Bethel A.M.E. Church cemetery in Byron, Georgia (Matternes et al. 2012). Additionally, Lee (2014) notes that there are African American graves from the plantation that was situated on Ocmulgee Mounds National Historical Park and notes that this is not widely known, nor are the Works Progress Administration-era excavations of the Swift Creek site, which were excavated by an all-female African American Works Progress Administration crew. Additional areas of research for the park would include emphasis on the lives of enslaved African Americans and their descendants who may still live in the surrounding community (Lee 2014).

As of spring 2018, there were 13 Native American tribes traditionally associated with Ocmulgee Mounds National Historical Park: Alabama–Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Cherokee Nation, Eastern Band of Cherokee Indians, United Keetoowah Band of Cherokee Indians in Oklahoma, Coushatta Tribe of Louisiana, Kialegee Tribal Town, Muscogee (Creek) Nation, Thlopthlocco Tribal Town, Poarch Creek Band of Creek Indians, Miccosukee Tribe of Indians, Seminole Nation of Oklahoma, and Seminole Tribe of Florida (New South Associates 2020).

Recent park documents and oral histories captured during the Ethnographic Overview and Assessment (Andrews, Collings, and Lee 2014) and the draft historic resource study (New South Associates 2020) have sought tribal perspectives and input to better understand the history of this part of Georgia and improve interpretation and education at the park. Some tribal citizens, in turn, are becoming more open to sharing their history in the Southeast and connecting their youth to their ancestors and heritage for the continuation of the tribes (Perez 2019). One of the reasons that tribal citizens have not visited or regularly engaged, as stated in oral history interviews, is that their elders had told them to not go back to Macon. The reasons for this range from the sacredness of the Ocmulgee Mounds to feeling the continued pain from the tribe’s removal along Nene estemerku (Road of Misery), also known as the Trail of Tears (Butler 2019; Freeman 2019; Harjo 2019). The Macon Plateau continues to be a sacred site for these tribes, and representatives have said that they want to change the perception that Native peoples are gone (New South Associates 2020; Lee 2014).

In 2019, the John D. Dingell, Jr. Conservation, Management, and Recreation Act (PL 116-9) renamed Ocmulgee National Monument as Ocmulgee Mounds National Historical Park and adjusted the boundary to encompass a total of about 3,700 acres of land, connecting the Macon Plateau to the Lamar site. Also, in 2019, the Muscogee (Creek) Nation purchased a portion of Brown’s Mount. This purchase represents the first return of the Muscogee (Creek) Nation to the Georgia landscape since their removal from the land (Watson 2020) and further demonstrates their desire to protect the resources there (Perez 2019). Land was central to Creek identity early on, as attested by US records in the late 1700s, and continues to be a core identity element today (Harjo 2019; Brockington and Associates 1999).
Although in the West the total number of etvlwv have decreased in the subsequent centuries, the etvlwv of the homeland in the Southeast are remembered and included in contemporary ceremonial practices. When tribal citizens visit Ocmulgee Mounds National Historical Park, they can see cultural similarities between their contemporary practices and traditions in the West with the archeological material and landscape features at the park (Lee 2014). As Harjo reiterates, though, the embers were removed from the etvlwv in the East and reestablished in the West, and the tribal towns will not return to the Ocmulgee area (Harjo 2019).

Although the archeological investigations and subsequent books, articles, and reports have taught much about the ancient people living in the Ocmulgee area, there are still considerable knowledge gaps and areas for future research (Andrews, Collings, and Lee 2014). Some of these underexplored research opportunities include plantations and the lives of enslaved individuals; Reconstruction-era farms, tenancy, and sharecropping; manufacturing in wood, tar and charcoal, clay, minerals, and iron; brick making and industry; transportation; military fortifications, installations, and supporting industries and settlements; cemeteries; and areas of cultural interaction to better understand the rich mosaic of cultural and ethnic identities (Hammack 2011; Joseph et al. 2004; Shull 2000).

ENVIRONMENTAL CONTEXT

This section presents a broad overview of the physical and biological resources and processes within the 50-river-mile study area. The study area’s natural resources were identified through a review of books, reports, federal and state agency planning documents, and academic journal articles, as well as numerous interviews with resource managers and researchers who have worked with the resources in the study area.

The Bond Swamp National Wildlife Refuge Comprehensive Conservation Plan, Natural Resource Condition Assessment for Ocmulgee Mounds National Historical Park, Ocmulgee River Basin Management Plan, and the Integrated Natural Resources Management Plan for Robins Air Force Base were the primary sources of information regarding the study area’s climate, geology, and water and biological resources. Furthermore, this section was presented for public review and comment in spring of 2021, and additional sources and content were developed as guided by responses to those public comments (see “Appendix C: Civic Engagement Summary”). Field visits were conducted by National Park Service staff to gain familiarity with the resources, but the National Park Service did not conduct any original scientific research relating to the area’s resources as part of this study.

Climate

Located near the geographical center of Georgia, the study area has moderate climatic conditions throughout the year. The climate is a blend of maritime and continental types. Rarely does either system dominate for extended periods. Average rainfall at Ocmulgee Mounds National Historical Park, at the northern end of the study area, averages 51 inches per year (Burkholder 2017). Rainfall is reasonably well distributed throughout the year, although winter is the wettest season (USFWS 2009). Severe storms occur occasionally in the area. Tornadoes occur approximately twice each year in middle Georgia (USFWS 1989 as cited in USFWS 2009). Thunderstorms occur on an average of two days out of five during the period June through August. Snow occurs at some time during most winters, but amounts are usually small, as evidenced by monthly means of 0.1 to 0.9 inches. The heaviest snowfall over a 24-hour period occurred in February 1973 with 16.5 inches (USFWS 2009).
Mild winters and hot summers characterize the study area. January is usually the coldest month, with a mean temperature of 45.5°F and an average daily minimum of 35.5°F (USFWS 2009). July is normally the hottest, with mean temperatures of 81.1°F and an average daily maximum of 91.8°F. During winter, temperatures seldom remain below freezing for long. The prevailing northwesterly winds of winter and early spring are frequently superseded by southerly flows of warm, moist tropical air.

Further south, the terrain is undulating and rolling and has a less-developed drainage system (Woods 1967). Except for the floodplains and drainageways, the landscape is well drained. However, in places where sediment washed away from the uplands has filled stream channels, excess water drains away slowly, and the floodplains are swampy or wet much of the time (Woods 1967).

**Geology**

**Topography**

The study area is located just below the Fall Line, a 20-mile-wide (32 kilometers) geological boundary separating the hilly terrain and crystalline rock of the Piedmont region from the flat terrain and sedimentary rocks of the Coastal Plain. The Fall Line extends from Columbus, Georgia, to Augusta. Its name originated from the waterfalls and rapids that are the inland obstacles to navigation on Georgia’s major rivers. The Fall Line can also be recognized by stream geomorphology. Streams and rivers above the Fall Line typically have small floodplains, and streams and rivers below it meander through floodplains or marshes (Burkholder 2017). The floodplains along the Ocmulgee River and its tributaries are much wider in this area than floodplains in the southern Piedmont region.

General topographic features define the study area, including a series of hills and valleys. Ridges are broad and gently sloping, and steep side slopes extend from the hilltops. Many streams and drainages dissect the area. Almost all smaller tributaries flow southward to join the larger creeks at an acute angle (LeGrand 1962). The upland divides are smoother and broader than the Sandhills to the north, and the streams and their floodplains between the divides are broader and farther apart.

In the Bond Swamp National Wildlife Refuge, the geology is dominated by the Tuscaloosa formation (USFWS 2009). The Tuscaloosa formation is the oldest outcropping formation of the Coastal Plain of Georgia (LeGrand 1962). The formation extends into Georgia from the vicinity of Tuscaloosa, Alabama, where it is typically exposed. The Tuscaloosa formation consists of light-colored sand, sandy clay, and lenticular masses of clay. The formation in Bibb County is characterized by fine to coarse sand, in places mingled with white kaolin and in others separated by lenticular and pure kaolin masses.
In northern Twiggs County, the Tuscaloosa formation consists of clay, sand, and gravel. East of the Ocmulgee River, along the interstream area, outlying bodies of the late Eocene age occur. The deposits consist of Barnwell formation massive, deep-red clayey sand, beds of green or gray Fuller’s earth type clay, and beds of limestone with spotty outcroppings. Alluvial deposits bordering the Ocmulgee River and some parts of the larger creeks are the youngest sediments in the area. They are of Pleistocene and Recent age. These deposits comprise unsorted clay, sand, and gravel (USFWS 2009). At Robins Air Force Base, the depth to consolidated deposits is estimated to be at least 1,700 feet (USAF 2017).

**Soils**

The northern section of the Coastal Plain is characterized by mostly red, well-drained soils that have a sandy surface layer and a loamy or clayey subsoil (GA DNR 2004). Water tables are not evident in most soils, except in depressions and along floodplains. The southern part of the Coastal Plain is more variable. Upland areas are dominated by yellow and brown, well-drained soils that have sandy surface and subsurface layers and a loamy subsoil. Many of these soils have a perched water table at various depths during wet seasons. A significant area of sandier soils occurs near the Ocmulgee River, especially along the eastern side of the floodplain.

Soils in the area of Ocmulgee Mounds National Historical Park are classified as Bibb typic, fluvaquent, which is located on floodplains of streams in the Coastal Plain (Rasmussen 2009). The Bibb soils exhibit very deep, poorly drained, and moderately permeable characteristics and formed in stratified loamy and sandy alluvium. The soil is on the Georgia list of hydric soils, indicating that they are flood prone and are likely indicators of wetland conditions.

The majority of soils on the refuge are categorized as Chewacla–Congaree–Hydroquents (USFWS 2009). The US Fish and Wildlife Service (2009) notes that these soils are typical of the floodplain of the Ocmulgee River and its tributaries. Chewacla series soils generally contain a medium or small amount of organic matter and are medium acid or strongly acid (Woods 1963). Congaree soils are geographically associated with Chewacla soils but are better drained (Woods 1979). Both are found along streams that drain from the Piedmont uplands.

At Robins Air Force Base (base), soil scientists initially mapped the upland soils on the property as Lucy sand, Lakeland fine sand, and Orangeburg sandy loam, which range from very sandy and well drained to well drained and loamy (Hammack 2009). Bottomland soils were found to be Chastain-and-Leaf soils or swamp and are poorly drained and subject to intermittent flooding (Woods 1967). A more recent soil survey produced more detail but included some soil series not mapped in the original survey (USAF 2017). In Pulaski County, soils in the floodplain of the Ocmulgee River are categorized as Tawcaw–Meggett soils, which are somewhat poorly drained to poorly drained soils that have a clayey surface layer and subsoil (Pilkinton 2003). The Boswell–Susquehanna–Oktibbeha complex and the Greenville series are the most abundant upland soil types at Oaky Woods Wildlife Management Area, while Tawcaw soils are common in the bottomland areas (GA DNR 2014). Greenville soils comprise most of the uplands at Ocmulgee Wildlife Management Area, while Chastain and Leaf soils are found in the floodplain of the Ocmulgee River (GA DNR 2010).
Some of the inconsistencies in soil categorization between counties, particularly in the floodplain of the Ocmulgee River, may be due to the different county soil surveys being completed at different times, with mapping completed at different scales and/or at different levels of detail (Soil Survey Staff n.d.).

Water Resources

Geographic Scope

The Ocmulgee River and its tributaries have watersheds that extend beyond the study area. This section describes the broader watershed.

Ocmulgee River Basin

The Ocmulgee River basin is located in the central part of Georgia, occupying an area of approximately 6,085 square miles. The basin occupies parts of the Piedmont and Coastal Plain physiographic provinces, which extend through the southeastern United States. The Ocmulgee River joins the Oconee River to form the Altamaha River, which drains into the Atlantic Ocean. The headwaters of the Ocmulgee River system consist of three streams—Tussahaw Creek, the Yellow River/South River, and the Alcovy River. These three streams drain the eastern and southeastern Atlanta metropolitan area, and southeast of Atlanta they flow into an artificial impoundment called Lake Jackson created by the Lloyd Shoals Dam (constructed in 1911). The Ocmulgee River begins at the outflow of this impoundment. The river flows southward, converges with the Little Ocmulgee River at Lumber City in Telfair County, and about 8 miles (13 kilometers) farther downstream it converges with the Oconee River to form the Altamaha River. In the study area, numerous tributaries flow into the Ocmulgee River, including Tobesofkee, Echeconnee, and Stone Creeks.

The Ocmulgee River basin contains a dynamic hydrological system that includes interactions between streams, reservoirs, floodplains, estuaries, and aquifers (GA DNR 2004). Many principal rivers receive a substantial contribution of water from groundwater baseflow during dry periods. Three major aquifer systems, including the Piedmont crystalline rock aquifer and two Coastal Plain aquifers, underlie the Ocmulgee River basin (GA DNR 2004).
Hydrologic Dynamics

The Bond Swamp National Wildlife Refuge Comprehensive Conservation Plan (2009) notes that reservoirs and accompanying utility interests along drainages upstream have led to altered hydrologic dynamics along the Ocmulgee River (USFWS 2007 as cited in USFWS 2009). Seasonal flooding (primarily October through March) of bottomland forests still occurs with regularity; typically, the refuge floods five to six times a year, with flood events lasting from a couple of days to two to three weeks (USFWS 2009). Although the river returns to normal levels quickly, the swamp often holds flood waters for several weeks afterward. The extent and frequency at which “natural” flooding occurs is in large part affected by hydropower operations at Lake Jackson, upstream along the Ocmulgee River. The Lloyd Shoals Dam at Lake Jackson was constructed in 1911. The hydrology of the Ocmulgee River has been further affected by the installation of the Macon levee in 1950 and the construction of Interstate 16 in the 1960s, both of which cut the river off from its floodplain and disrupt natural flow (Burkholder et al. 2017; DeVivo et al. 2008). An unfinished levee was constructed in the late 1930s to protect the Lamar unit of Ocmulgee Mounds National Historical Park from flooding and borders the northern, eastern, and part of the southeastern sides of that unit (Burkholder et al. 2017).

The Metropolitan North Georgia Water Planning District (MNGWPD) uses the Ocmulgee River for at least 8% of its water supply, and that percentage is projected to increase (Burkholder 2017). The water withdrawn by the Atlanta area is returned to the Ocmulgee River as sewage that, except for during malfunction periods, is treated to some extent (that is, with secondary treatment or more advanced treatment) (MNGWPD 2011 as cited in Burkholder et al. 2017).

Water Quality

The stretch of the Ocmulgee River that flows through the refuge has been classified as a fishing stream. Though quite turbid in the winter and spring months, the general water quality in the entire Ocmulgee River basin is “very good” (USFWS 1999 as cited in USFWS 2009). The Ocmulgee River, via Lucas Lake Reservoir, is the water source for the Macon Water Authority (MWA), which serves the city of Macon, Bibb County, and portions of Monroe and Jones counties. In 2009 the Macon Water Authority pumped more than 28 million gallons of water per day from the river (MWA as cited in USFWS 2009). In Macon, the Ocmulgee River had an average daily flow of 1,740 million gallons. Drought conditions have at times severely reduced this flow rate and will do so again in the future. The Ocmulgee River, south of Macon, historically had water quality problems due to point discharges such as pulp/paper manufacturing and urban sewage effluent. The Clean Water Act and resulting regulation have corrected these problems. Nationally, the primary causes of water impairment are related to stormwater runoff/non-point pollution, and many of the water quality impairments in the Ocmulgee watershed are due to such runoff. The Ocmulgee River from Macon to downstream of Bond Swamp National Wildlife Refuge is on the 2002 Environmental Protection Agency 303(d) list of impaired waters for the presence of poly-chlorinated biphenyls. The draft 2006 303(d) list also includes the impairments of fecal coliform and low dissolved oxygen, likely caused by urban runoff. Tobesofkee Creek is also listed for fecal coliform and low dissolved oxygen. Another significant threat to water quality is mercury, particularly mercury emissions that result from coal burning (USFWS 2009).
The forested wetlands in the study area serve to enhance the quality of the area’s water resources. These wetland areas catch the overflow of flood waters during the wet seasons and store water for longer periods during dry seasons. The water resources in these wetlands replenish both surface and ground water systems. Water passing through is filtered by a natural process that aids in removal of organic and inorganic wastes, as well as silt and other sediments (USFWS 2009).

### Biological Resources

#### Historical Ecological Conditions

The study area’s current species composition has been influenced by thousands of years of human occupation of the area. A paleoenvironmental study completed in 2009 reconstructed the climatic and biotic history of the area through an analysis of a thick peat deposit in Robins Air Force Base (Hammack 2009). Around 8,000 to 5,000 years ago, species present included oak, gum, pine, alder, sweetgum, yellow poplar, basswood, magnolia, and grape. Increased charcoal also suggests that there was a moderate increase in fire during this period, possibly resulting from lightning strikes and/or the intentional burning of the understory by native peoples (Lamoreaux 1999 as cited in Hammack 2009). From 3,800 BP to present, pollen in the sediment record indicates that pine, oak, and gum were present, as well as understory trees, shrubs, and herbs—representing conditions that are very similar to modern day (Lamoreaux 1999 as cited in Hammack 2009).

According to the Muscogee (Creek) Indian tradition, it was in the area of Ocmulgee Mounds that their ancestors “first sat down” and began farming the productive alluvial bottomlands of the Ocmulgee River corridor (NPS 2014).

Agricultural practices likely included clearing vegetation and other modifications of forest and forest understory, particularly through burning. In the late 1770s, William Bartram traveled through Georgia passing the Ocmulgee Old Fields (Wheeler 2007). Bartram (1791) noted that the trading road on the east bank of the Ocmulgee River ran nearly 2 miles through cultivated fields in the rich lowlands of the river. However, the native plant communities that he noted in the vicinity of the Ocmulgee River were similar to the communities that exist today. Traveling from the banks of the Ocmulgee River westward, Bartram (1791) described the terrain as “generally ridges of low swelling hills and plains supporting grand forests, vast Cane meadows, savannas and verdant lawns.”

These natural communities also occur in the area today, although they have all been reduced in extent since the time of European settlement through conversion for agriculture, logging, introduction of invasive plant and animal species, and development. While relatively few details are known about prior land-use history at the refuge, there are signs of clear-cutting or selective timber harvesting in most portions, including areas where high-grading practices may have been used (Wright 2002). In particular, there has been an extensive loss of canebrakes (Platt and Bradley 1997). Platt and Brantley (1997) hypothesized that the large canebrakes recorded by European settlers and explorers were probably anthropogenic in cause, resulting from desertion of agricultural fields and burning practices. As populations of native people declined due to the introduction of disease by European settlers and explorers, agriculture also declined, and giant cane invaded fallow fields (Platt and Brantley 1997). Additionally, native peoples in the area continued to regularly burn cane, which maintained and expanded canebrakes by removing competing vegetation (Campbell 1985; DeVivo 1991 as cited in Platt and Brantley 1997).
However, after European Americans settled the area, canebrakes rapidly declined due to a combination of overgrazing, altered burning regimes, and land-clearing (Platt and Brantley 1997).

The largest canebrake in modern times possibly occurred along the Ocmulgee River bottoms near Macon, Georgia, as noted by biologist Brooke Meanley (Cely n.d.). In the 1940s, Meanley estimated one of these canebrakes covered a square mile (640 acres) with cane stems averaging 15 to 20 feet high and with maximum diameters of 1.25 inches. More recently, Platt and Brantley (1997) note that existing southeastern canebrakes are only a “remnant” of the vast tracts of giant cane reported by earlier writers.

**Ecological Overview**

The study area contains over 100,000 acres of forested floodplains and uplands. Most of the study area is forested wetlands that are flooded periodically each year. Within the study area, the sixth-order Ocmulgee River and its tributaries meander through densely forested wetlands. These wetlands and other major water features such as creeks, oxbow lakes, and sloughs support numerous fish, birds, herpetofauna, mammals, and other aquatic life.

The study area is part of the Atlantic Coastal Plain, a biophysiographic region of low relief along the East Coast of the United States. Biophysiographic provinces are large geographic areas with similar biological communities, geologic history, structures, and landforms. The provinces are based on the recognition that the general character of natural diversity is regionally distinct and correlated with broad patterns of physiography. The Atlantic Coastal Plain extends 2,200 miles from the New York Bight southwards to a Georgia/Florida section of the Eastern Continental Divide.

The province is bordered on the west by the Atlantic Seaboard Fall Line and the Piedmont Plateau, to the east by the Atlantic Ocean, and to the south by the Floridian province. Atlantic Coastal Plain forests have many key wetland areas, including those associated with the large river bottomlands as well as many types of isolated wetlands. These play a critical role in maintaining biodiversity in this region.

The Georgia Department of Natural Resources further divides the Atlantic Coastal Plain into two physiographic ecoregions: Southeastern Plains and the Southern Coastal Plain. These regions are comprised mostly of loblolly, slash, and longleaf pine and lowland hardwoods. The study area is part of the Southeastern Plains.

Within the Atlantic Coastal Plain, the Ocmulgee floodplain itself largely coincides with the Level IV ecoregion, “Southeastern Floodplains and Low Terraces,” as delineated by the Environmental Protection Agency. Ecoregions are areas where ecosystems (and the type, quality, and quantity of environmental resources) are generally similar. According to the Environmental Protection Agency:

**Southeastern Floodplains and Low Terraces** comprise a riverine ecoregion of large sluggish rivers and backwaters with ponds, swamps, and oxbow lakes. **River swamp forests of bald cypress and water tupelo and oak-dominated bottomland hardwood forests provide important wildlife corridors and habitat.** In Alabama, cropland is typical on the higher, better-drained terraces, while hardwood forests cover the floodplains. In Georgia, the terraces are not as broad and are primarily in bottomland hardwood forest (Griffith et al. 2001).
This region includes the major alluvial river corridors, such as the Chattahoochee, Flint, Ocmulgee, Oconee, Ogeechee, and Savannah Rivers. Large river bottomlands are a priority area for the State of Georgia. Many of these rivers have unique flora and fauna associated with them. The forest overstory is typically dominated by a combination of tall, broad-leaved deciduous trees and needle-leaved deciduous trees, while the understory can be quite variable. Variation from site to site is driven by site-specific variables such as hydroperiod, terrain, and elevation, resulting in diverse vegetation distribution patterns around rivers of the Coastal Plain (Hupp 2000).

Significant portions of the native plant cover in this region have been impacted by construction of dams, clearing for agriculture and timber, conversion to pine plantations, invasion by exotic pest plant species, and development. Habitat loss and modification attributed to increases in suburban areas, including loss of stream habitat due to construction of the water supply reservoirs to accommodate suburban growth, represent the primary long-term threats to wildlife diversity in Georgia. In particular, forested wetland habitat has been disappearing at an increasing rate over the last several decades. This is particularly common across the southeastern United States, where it is estimated that over 90% of the total forested wetland loss occurred between the mid-1950s and mid-1970s (Keeland et al. 1995 as cited in USFWS 2009). Because of this, almost all of the native plant communities that remain contain sensitive, rare, or endangered flora and fauna.

In recent decades, some biological surveys and inventories have been conducted within or near the study area, including vegetation inventories, surveys associated with environmental impact assessments, studies of individual species locations and movement, reports on habitat, flora, and fauna of various public lands, and more. However, these studies have all been limited to particular geographic areas and often to particular biota, meaning that biological data does not exist at an equal level of detail throughout the study area. In addition, this means that biological resources, such as rare plants, animals, and habitats, may exist in unsurveyed areas beyond their current known locations.

**Vegetation and Habitat**

The following sections give a broad overview of the vegetation and wildlife resources found in the study area. The vegetation descriptions for the sections titled “Coastal Plain Hardwood and Swamp Forests,” “Upland Forests,” and “Beaver Swamps/Oxbow Lakes” are taken from the Bond Swamp National Wildlife Refuge Comprehensive Conservation Plan (USFWS 2009). The vegetation description for the sections titled “Blackland Prairies” and “Coastal Plain Brownwater (Alluvial) Rivers and Streams” are taken from Georgia’s Natural Communities and Associated Rare Plant and Animal Species: Thumbnail Accounts (Chafin 2011). Within the broad habitat classifications described below are many more specific vegetation communities, several of which are sensitive or rare. Many of the plant species that are present in the corridor are culturally significant to descendant Creek peoples. Because comprehensive biological surveys have not been conducted for all portions of the study area, it is likely that rare or imperiled vegetation communities exist or might be found in new locations within the study area.

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4. The general habitat types described here give a broad perspective of the habitat types in the study area but do not represent the diversity of distinct plant communities. The National Vegetation Classification System is the system used by the National Park Service when conducting vegetation mapping. Vegetation mapping is completed at the association level, which generally requires field visits for accurate identification and mapping. Plant community data at this level of detail is not available for the study area.
Coastal Plain Hardwood and Swamp Forests

Bottomland hardwood forests and canebrakes in the southeastern plains are identified as a high-priority habitat in the Georgia State Wildlife Action Plan (GA DNR 2015). The Bond Swamp conservation plan indicates that in bottomland hardwood and swamp forest types, principle overstory species include water tupelo (*Nyssa aquatica*); black gum (*Nyssa sylvatica*); red maple (*Acer rubrum*); sweetgum (*Liquidambar styraciflua*); elm (*Ulmus spp.*); ash (*Fraxinus spp.*); hickory (*Carya spp.*); and water, willow, overcup, and swamp chestnut oaks (*Quercus nigra, Q. phellos, Q. lyrata,* and *Q. michauxii*) (USFWS 2009). Wright (2002) also observed American elm (*Ulmus americana*) and sugarberry (*Celtis laevigata*) within the refuge. In some parts of the refuge, a mature forest structure with trees over 120 years old has been observed (Wright 2002). Swamp forests are essentially the lowest elevation areas of bottomland systems and are distinguished as being subject to extended or regular periods of inundation. As bottomland forests grade into swamps, tree species diversity decreases and forests tend towards dominance by water tupelo and, in the southern portion of the study area, bald cypress (*Taxodium distichum*). Beaver ponds and oxbow-type lakes can lead to significant portions of refuge floodplains remaining inundated throughout the year, allowing establishment of submerged and emergent aquatic plant communities.

Common midstory and understory species in bottomlands, particularly in the refuge, include poison ivy (*Toxicodendron radicans*), rattan vine (*Berchemia scandens*), flowering dogwood (*Cornus florida*), Eastern hophornbeam (*Ostrya virginiana*), boxelder (*Acer negundo*), non-native privets (*Ligustrum spp.*), and others. Giant cane (*Arundinaria gigantea*) is present sporadically in small patches in the refuge (USFWS 2009); in some places, it is a dominant feature of the understory, especially on the natural levee next to the river (Wright 2002). Although other factors are at play, the development and complexity of understory layers is predominantly influenced by the combined impacts of light penetration and hydrologic forces that affect recruitment, survival, and growth of shrubs, vines, and small trees. Significant patches of bottomland forest habitat on the refuge are closed canopy and lack understory complexity, especially in interior stands away from roads, sites of old logging operations, and other disturbed areas. Nevertheless, areas do exist where midstory and understory strata are quite well developed, providing important structure and foraging/nesting substrates for many wildlife species (USFWS 2009).

At Robins Air Force Base, farther south in the study area, southern floodplain forest is present on bottomlands associated with streams and rivers (USAF 2017). The largest parcel of undeveloped land is the bottomland forest located on the Horse Creek/Ocmulgee River floodplain on the eastern side of the base. This section includes a seasonally flooded old growth bottomland hardwood forest with an overstory of oaks and other hardwoods. Interspersed among this bottomland forest are tupelo sloughs. The floodplain of Sandy Run Creek that flows along the southern boundary of the base also is relatively undisturbed bottomland forest. This natural swamp forest community has a canopy dominated by sweetbay (*Magnolia virginia*), redbay (*Persea borbonia*), blackgum, sweetgum, red maple, and water oak.
At Ocmulgee Wildlife Management Area, bottomland hardwoods are associated with the floodplain of the Ocmulgee River, Magnolia and Shellstone Creeks, Carden Branch, and smaller creeks and drainages (GA DNR 2010). Much of the floodplain has been heavily and recently impacted by selective hardwood cutting (GA DNR 2010). At Oaky Woods Wildlife Management Area, bottomland hardwoods are associated with the floodplain of the Ocmulgee River, Big Grocery Creek, Little Grocery Creek, Beaver Creek, and the associated drainages (GA DNR 2014).

Wright (2002) noted that in Georgia, private land management activities that impact bottomland forest ecosystems appeared to have increased after several decades of relative stability. These impacts include conversion of bottomland forests to pine plantations, as well as timber harvests involving the practice of “high-grading,” in which only the largest and most valuable trees are removed (Wright 2002). This may result in a population of individual trees with less desired genetic makeup, resulting in a degraded population (M. Ford, pers. comm., 2020). Some of the bottomland forest in the study area outside of the refuge and state wildlife management areas are managed as pine plantations.

**Upland Forests**

The Bond Swamp conservation plan indicates that upland forests within the study area and the refuge can be broadly classified as oak–hickory–pine (USFWS 2009). Chief overstory species include hickories; sweetgum; white oak (*Q. alba*); persimmon (*Diospyros virginiana*); tulip poplar (*Liriodendron tulipifera*); and loblolly, shortleaf, and longleaf pines (*Pinus taeda, P. echinata, and P. palustris*). Mixed forest types on the refuge are typically hardwood dominated.

The fire-tolerant/dependent pines now comprise only a minor component of upland stands, presumably due to the exclusion and suppression of fire, and resultant hardwood encroachment. Hardwoods can shade and suppress existing pine trees and preclude the establishment of future pine cohorts through shading and competition for space and nutrients. Advance regeneration of softwood species appears to be lacking in much of the uplands at Bond Swamp National Wildlife Refuge. A mixture of understory species includes dogwood, red bud (*Cercis canadensis*), and greenbrier (USFWS 2009).

At Robins Air Force Base, upland forest occurs primarily in the southeastern portion of the base. The current upland pine forests are dominated by longleaf pine and loblolly pine, while upland hardwood forests are characterized by dominants including various species of oaks, southern magnolia (*Magnolia grandiflora*), American beech (*Fagus grandiflora*), sweetgum, and loblolly pine (USAF 2017). Other trees present include sweetgum, flowering dogwood (*Cornus florida*), elm, redcedar (*Juniperus virginia*), southern red oak (*Quercus falcate*), and hickories (USAF 2017). Ocmulgee and Oaky Woods Wildlife Management Areas contain several thousand acres of pines, almost all of which are less than 50 years old and the majority of which are loblolly pine (GA DNR 2010, 2014). Ocmulgee Wildlife Management Area also contains some slash, sand, and longleaf pine stands, as well as upland hardwoods and mixed pine-hardwood forest (GA DNR 2010).
**Beaver Swamps/Oxbow Lakes**

The Bond Swamp conservation plan notes that many parts of the floodplain in the study area remains inundated throughout the year due to beaver swamps and oxbow-type lakes (USFWS 2009). Beavers build ponds on small- to medium-sized streams or on small channels in floodplains in order to raise water levels. Beaver ponds, and the marshes that develop around their edges, provide habitat diversity in a region of the state where ponds and lakes do not otherwise occur naturally. Many species of moist-soil and aquatic plants establish in these areas, including cattail, sedges, rushes, arrowhead, pond weed, duckweed, and water shield. Button bush is a common understory species along with river cane and alder. Wetland trees, such as red maple and willows may be present, depending on the successional state of the pond (USFWS 2009; Chafin 2011).

**Blackland Prairies**

*Georgia’s Natural Communities and Associated Rare Plant and Animal Species: Thumbnail Accounts* notes that blackland prairies are among the rarest natural communities in Georgia, occurring in only a few locations in Houston, Peach, Twiggs, and Bleckley Counties (Chafin 2011). Examples of blackland prairies that are open to the public are found in Oaky Woods Wildlife Management Area. Blackland prairies are small, open grasslands surrounded by hardwood and pine forests. They are characterized by their chalky, clay-rich soils that are derived from marl, chalk, or limestone. These soils shrink and crack when dry and expand when wet, becoming very sticky. Shrink-swell soils inhibit the growth of trees and shrubs and instead promote the development of an interesting and rare plant community dominated by showy wildflowers such as gray-headed coneflower, starry rosinweed, butterfly-weed, whorled milkweed, blue sage, eastern coneflower, and eastern gray goldenrod, as well as prairie grasses such as Indian grass, big blue stem, broomsedge, three-awn, and muhly grass (Chafin 2011). Sixteen rare plants are found in grassland/woodland habitats of Oaky Woods (GA DNR 2014). Blackland prairies are identified as a high-priority habitat in the *Georgia State Wildlife Action Plan* (GA DNR 2015).

**Coastal Plain Brownwater (Alluvial) Rivers and Streams**

*Georgia’s Natural Communities and Associated Rare Plant and Animal Species: Thumbnail Accounts* notes that brownwater (alluvial) rivers and streams originate in the Piedmont and carry large amounts of sediments, mostly eroded from Piedmont agricultural lands, that color the water brown and contribute to the creation of extensive floodplain swamps (Chafin 2011).
These usually large, meandering rivers have sand and silt substrates and floodplains that are inundated for long periods. Extensive cypress-gum swamps can be found on most major alluvial rivers in Georgia’s Coastal Plain. Brownwater rivers and their floodplain communities support a wide variety of fish and other aquatic organisms, including many species of rare and endangered fish and mussels (Chafin 2011).

The dynamic nature of the flooding regimes along the waterways and adjacent floodplains provides a constantly renewable fishery supporting a diversity of warmwater species (approximately 100), including largemouth bass (*Micropterus salmoides*), spotted bass (*M. punctuatus*), crappie (*Pomoxis spp.*), bluegill (*Lepomis macrochirus*), and white catfish (*Ictalurus catus*) (USFWS 2009). Due to the lack of significant downstream obstructions, several anadromous species also occur in the Ocmulgee system, including striped bass (*Morone saxatillis*), American eel (*Anguilla rostrata*), and Atlantic sturgeon (*Acipenser oxyrinchus*). Several species of freshwater mussels and many other species of fish are possible within the study area. The Ocmulgee River is a designated critical habitat for the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), which was federally listed as endangered under the Endangered Species Act in 2012.

**Special Status Plants**

One federally listed plant species is known to occur in the study area: the relict trillium (*Trillium reliquum*) (endangered). Both of these species are also on the protected plant list of Georgia (GA DNR 2020). The US Fish and Wildlife Service has proposed to list the Ocmulgee skullcap (*Scutellaria ocmulgee*) as a threatened species and designate critical habitat under the Endangered Species Act (USFWS 2022a).

The study area also contains two species listed as “at risk” by the US Fish and Wildlife Service—the Gulf sweet pitcher plant (*Sarracenia rubra ssp. Gulfensis*) and the Georgia bully (*Sideroxylon thornei*)—and one “candidate” species—Georgia aster (*Symphyotrichum georgianum*). The study area contains habitat that may be suitable for three other federally listed plant species: fringed campion (*Silene polypetala*) (endangered), Canby’s Dropwort (*Oxypolis canbyi*) (endangered), and Harperella (*Ptilimnium nodosum*) (endangered) (USFWS 2022b). The study area also contains habitat that may be suitable for other species on the protected plant list of Georgia, such as the yellow flytrap (*Sarracenia flava*) (state unusual), ovate catchfly (*Silene ovata*) (state rare), sweet pitcher-plant (*Sarracenia rubra*) (state threatened), and the Indian olive (*Nestronia umbellula*) (state threatened) (NPS 2014). The Robins Air Force Base Integrated Natural Resource Management Plan indicates that Ocmulgee skullcap is the only state-protected plant reported to occur on the base, and no federally listed plant species have been recorded.

**Fire Regime**

Today, fire does not appear to be a dominant natural factor in the bottomland hardwood forests and swamps (Pyne and Teague 2015). Fire is probably more important in small stream examples than in larger river ones, because distances to uplands are short and stream channels and sloughs are smaller and less effective as firebreaks. Most of the vegetation is not very flammable and usually will not carry fire. However, historical references to canebrakes dominated by *Arundinaria gigantea* suggest that at least in some portions of stands, fire may have once been more of a factor (Gagnon 2009). Giant cane, when associated with bottomland hardwood forests, is successional and is thought to be maintained by periodic fires.
Fires occurring about once every decade will maintain stands of giant cane; more frequent fires promote fire resistant trees and shrubs, and yearly burning will eliminate cane (Platt and Brantley 1997). Conversely, if fire is completely suppressed, stand health will decline, and the stand will gradually be replaced by woody vegetation (Hughes 1966 as cited in Platt and Brantley 2001).

Upland forests in the study area include fire-dependent oak–pine and oak–hardwood forests and woodlands. In successional examples of oak-dominated forests, Pinus spp. (e.g., Pinus echinata, Pinus taeda) may dominate in stands for a number of decades, with oak and hickory gradually entering the understory and then the canopy (Pyne 2015b). In some areas, fire-intolerant species such as sweetgum and tulip tree may invade the understories of older stands on dry-mesic, acidic sites (Pyne 2014). When natural fires were more frequent, fire would have kept canopies open by limiting or slowing tree regeneration and would have promoted a more diverse, grass-dominated herb layer (Pyne 2015b).

In stands of shortleaf pine–oak forests and woodlands, fire is an important influence and may be the sole factor determining the relative dominance of pines versus hardwoods under natural conditions (Pyne 2015a). A sizeable hardwood component may be partly due to a lack of fire. Historically, natural fires probably were either (1) frequent and of low intensity or (2) a mix of low and higher intensity (Pyne 2014). Loblolly pine, longleaf pine, and shortleaf pine are generally fire resistant. Longleaf pine and shortleaf pine are both shade-intolerant species and do not survive or grow well without fire (Carey 1992a, 1992b), while loblolly pine will tolerate some shade when young but becomes intolerant with age (Carey 1992c).

Under current conditions, the understories of these stands are typically shrub- and small tree-dominated, with the typical species varying with aspect, soil, and moisture relations. More open and grass-dominated understories may have been more prevalent prior to the mid-20th century, when open grazing and surface fires were more common (Pyne 2014). However, changes in land use have prohibited the continuation of natural fire regimes on a broad scale. As a result, the landscape today differs from the historic open oak woodlands, parklike longleaf pine, and other fire-dependent habitats.

The Bond Swamp conservation plan notes that fire management at the refuge is conducted in the context of suppression (USFWS 2009). The response to any natural or artificially occurring fires on the refuge is to control and suppress them. As such, the fire-tolerant/dependent pines now comprise only a minor component of upland stands, likely due to the exclusion and suppression of fire and resulting hardwood encroachment. The refuge intends to complete a plan that allows prescribed fire use in order to restore, rehabilitate, and maintain fire-adapted ecosystems consistent with desired future habitat conditions (USFWS 2009).

At Robins Air Force Base, areas of longleaf pine forest had reverted to upland hardwood habitat due to past fire suppression. Prescribed burns were conducted in longleaf pine forests in 2004, 2009, and 2011 to facilitate the reestablishment of the original longleaf pine–wiregrass habitat (USAF 2017). Prescribed burning is also included in management plans for the state wildlife management areas within the study area as a method to reduce hardwood encroachment and stimulate growth of herbaceous vegetation in open canopy pine stands (GA DNR 2010, 2014).
Wildlife

The study area supports a diverse, abundant wildlife community, reflecting the vegetation and habitat types available. Bottomland forests and associated swamps are important habitats for a variety of wildlife groups, including neotropical migratory birds, waterfowl, mammals, reptiles, and amphibians. The wildlife subsection descriptions are taken from the Bond Swamp conservation plan (USFWS 2009).

Mammals

The Bond Swamp conservation plan notes that 50 species of mammals could occur within the study area (USFWS 2009). The US Fish and Wildlife Service (2009) notes that white-tailed deer (*Odocoileus virginianus*), gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), cottontail rabbit (*Sylvilagus floridanus*), and gray fox (*Urocyon cinereoargenteus*) occur commonly at the refuge. In addition, the study area and surrounding lands support low numbers of black bear (*Ursus americanus*) from one of three recognized populations in Georgia. Coyotes (*Canis latrans*) and beaver (*Castor canadensis*) also occur and can have important impacts on habitats and other wildlife on the refuge. Nonnative feral hogs (*Sus scrofa*) are also present in the study area. The US Fish and Wildlife Service (2009) notes that feral hogs reproduce quickly in the rich bottomland hardwood forests and cause a wide variety of environmental damage, including soil erosion, changing natural water flows by rooting and wallowing, feeding on rare and sensitive native plants, and competing with native wildlife. Other more diminutive species (e.g., shrews, rodents, and bats) are also likely to occur based on existing habitat conditions (USFWS 2009).

Further south, at Robins Air Force Base, the typical mammals seen on the base include, but are not limited to, white-tailed deer, black bear, bobcat (*Lynx rufus*), gray fox, raccoon, gray and fox squirrel (*S. niger*), eastern chipmunk (*Tamias striatus*), white-footed mouse (*Peromyscus leucopus*), pine vole (*Pitymys pinetorum*), short-tailed shrew (*Blarina brevicauda*), and cotton rat (*Sigmodon hispidus*) (USAF 2017). Mammals that have been reported at Ocmulgee or Oaky Woods Wildlife Management Areas include black bear, white-tailed deer, eastern cottontail (*Sylvilagus floridanus*), swamp rabbit (*Sylvilagus aquaticus*), gray squirrel, and fox squirrel (GA DNR 2010).

Amphibians and Reptiles

The Bond Swamp conservation plan notes that the combination of warm weather and wet areas in the area of the refuge provides ideal conditions for a variety of reptile and amphibian species (USFWS 2009).
About 80 species of reptiles and amphibians could occur on the refuge, including 26 species of snakes, 10 species of lizards, 12 species of turtles, 13 species of salamanders, and 18 species of toads and frogs. Although Bond Swamp is on the northern edge of the range for the American alligator (*Alligator mississippiensis*), it is occasionally seen on the refuge, especially on warm, sunny days. Alligators up to 10 feet in length have been documented on the refuge. There are several species of venomous snakes, including eastern cottonmouth (*Agkistrodon piscivorus*), copperhead (*Agkistrodon contortrix*), and timber rattlesnake (*Crotalus horridus*). Other common reptiles and amphibians that might be encountered at Bond Swamp National Wildlife Refuge include the box turtle (*Terrapene carolina*), eastern king snake (*Lampropeltis getula*), snapping turtle (*Chelydra serpentina*), green treefrog (*Hyla cinerea*) and southern fence lizard (*Sceloporus undulatus*). No reptile or amphibian species of special concern are known from the refuge, though several are possible, such as Southern dusky salamander (*Desmognathus auriculatus*) and spotted turtle (*Clemmys guttata*). Uplands could possibly support the poorly known coal skink (*Eumeces anthracinus*), and with reintroductions and appropriate habitat management, uplands could also support the gopher tortoise (*Gopherus polyphemus*) (USFWS 2009).

A baseline survey for reptiles and amphibians in 2003 recorded 32 reptile and amphibian species at Robins Air Force Base (USAF 2017). Turtles and frogs are the most diverse groups of reptiles and amphibians in both bottomland and upland habitats. Herpetofauna observed include eastern box turtle, common garter snake, and eastern cottonmouth. Gopher tortoises have been detected in Ocmulgee Wildlife Management Area in low numbers in recent years (GA DNR 2010).

**Birds**

The Bond Swamp Comprehensive Conservation Plan notes that roughly 200 bird species are thought to occur on the refuge and, by extension, in the study area (USFWS 2009). Many species of waterfowl, waterbirds, shorebirds, and neotropical songbirds pass through, overwinter, or nest in the refuge as they follow their seasonal migration routes. Waterfowl make extensive use of the wetlands and naturally flooded bottomlands during non-breeding periods (Sept–March). Mallard (*Anas platyrhynchos*), American black duck (*A. rubripes*), blue-winged teal (*A. discors*), wood duck (*Aix sponsa*), and ring-necked duck (*Aythya collaris*) are the most common species during these months. The study area supports one of the most significant concentrations of wintering waterfowl in middle Georgia (USFWS 2009). Although the flooded swamps of the Ocmulgee River and vicinity are difficult to survey accurately, the comprehensive conservation plan for the refuge estimates peak midwinter waterfowl usage at 3,000–5,000 individual birds (USFWS 2009). The area contains outstanding wood duck habitat, and several thousand wood ducks remain or return to the refuge to breed (USFWS 2009). Isolated beaver ponds and adjacent forests provide exceptional foraging habitat and rookery sites for herons, egrets, ibis, and anhingas (*Anhinga anhinga*).
The floodplain forests of the refuge are an important habitat supporting the conservation of dozens of species of resident and migratory landbirds, many of which are designated as priorities due to continued concern over declining populations, habitat threats, and other factors. Priority neotropical migratory birds found breeding on Bond Swamp National Wildlife Refuge include Swainson’s warbler (*Limnothlypis swainsonii*), prothonotary warbler (*Protonotaria citrea*), yellow-billed cuckoo (*Coccyzus americanus*), Acadian flycatcher (*Empidonax virescens*), and wood thrush (*Hylocichla mustelina*). A single pair of bald eagles (*Haliaeetus leucocephalus*) has been nesting on the refuge, and others may utilize the refuge in nonbreeding seasons. Other occurring bird species include woodpeckers, doves, kingfishers, hummingbirds, hawks, and owls. American woodcock (*Scolopax minor*) and wild turkey (*Meleagris gallopavo*) are two important gamebird species found on the refuge.

The refuge and surrounding lands form one of the largest remaining blocks of forested wetlands in Georgia, and their conservation is critical to the many species of landbirds that require large, relatively unfragmented forest systems to successfully breed and sustain their populations. At the same time, heterogeneity in forest age, structure, and composition is important in providing the full complement of resources and structural characteristics necessary to support a diversity of bottomland forest birds (USFWS 2009).

Birds found at Robins Air Force Base include wild turkey, bobwhite quail (*Colinus virginianus*), mourning dove (*Zenaida macroura*), red-eyed vireo (*Vireo olivaceus*), cardinal (*Cardinalis cardinalis*), tufted titmouse (*Parus bicolor*), wood thrush (*Hylocichla mustelina*), summer tanager (*Piranga rubra*), blue-gray gnatcatcher (*Polioptila caerulea*), hooded warbler (*Wilsonia citrina*), and Carolina wren (*Thryothorus ludovicianus*) (USAF 2017). Numerous bird species have been found on Ocmulgee Wildlife Management Area, including neotropical bird species such as Swainson’s warbler, Kentucky warbler (*Geothlypis Formosa*), wood thrush, hooded warbler (*Setophaga citrina*), yellow-billed cuckoo (*Coccyzus americanus*), and eastern wood pewee (*Contopus virens*) (GA DNR 2010). See the “Special Status Wildlife” section below for additional information on bird species in the study area.
Fish

The Bond Swamp conservation plan notes that the Ocmulgee River and Stone and Tobesofkee Creeks are the three principal waterways on Bond Swamp National Wildlife Refuge, and all are classified as fishing streams (USFWS 2009). The dynamic nature of the flooding regimes along these waterways and adjacent floodplains supports a diversity of warmwater fish species (approximately 100) including, largemouth bass (*Micropterus salmoides*), spotted bass (*M. punctuatus*), crappie (*Pomoxis* spp.), bluegill (*Lepomis macrochirus*), and white catfish (*Ictalurus catus*). Due to the lack of significant downstream obstructions, several anadromous species also occur in the Ocmulgee system, including striped bass (*Morone saxatilis*), American eel (*Anguilla rostrata*), and the federally endangered shortnose sturgeon (*Acipenser brevirostrum*) and Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*). Several species of freshwater mussels and many other species of fish are possible in the study area (USFWS 2009). See the “Special Status Wildlife” section below for additional information on fish species in the study area.

Invertebrates

The Bond Swamp conservation plan notes that approximately half of the expected butterfly species for the region have been documented on the refuge (USFWS 2009). Many of the 63 species of butterflies that have been identified are species of concern in Georgia (Johnson 2006 as cited in USFWS 2009). It is likely that many of the others occur within the study area, but perhaps infrequently or in limited numbers. Many species require specific host plants to complete their life cycles, and a number of such host plants require forest openings, early successional patches, and other sunlit areas to thrive. Some of the more common species tied to mature bottomlands and found on the refuge include the American snout (*Libytheana carinenta*), hackberry emperor (*Asterocampa celtis*), and tawny emperor (*A. clyton*) (USFWS 2009).

Special Status Wildlife

One federally listed animal species has been documented in the study area: the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) (endangered), which occurs in the Ocmulgee River system (USFWS 2009; Ingram and Peterson 2016).
Additionally, in the Bond Swamp conservation plan the US Fish and Wildlife Service notes that there are occasional sightings of wood stork (Mycteria americana) (threatened) in the refuge using the open wetland habitats for post-breeding feeding. Wood stork have also been observed at Ocmulgee Mounds National Historical Park (GBIF 2020). Bald eagles have actively nested on the refuge (USFWS 2009). In addition to the refuge’s year-round resident pair of eagles, during the winter months eagles may temporarily use the refuge as they pass through the region (USFWS 2009). The study area also contains habitat that may be suitable for the eastern indigo snake (threatened), gopher tortoise (Gopherus polyphemus), and monarch butterfly (Danaus plexippus) (USFWS 2022b). The gopher tortoise and monarch butterfly are candidate species for listing as endangered or threatened under the Endangered Species Act (USFWS 2022b).

The robust redhorse sucker (Moxostoma robustum), a Georgia state-listed endangered fish, occurs in the Ocmulgee River. This fish lives in Georgia rivers and was once thought to have disappeared from the Ocmulgee River entirely; however, it was rediscovered in the river near Bond Swamp National Wildlife Refuge in 1999 (USFWS 2009). The only juvenile robust redhorse ever collected in the Altamaha Basin was from the lower section of the study area, indicating that the lower reach of the Ocmulgee River may be important rearing habitat for this species (GA DNR 2021).

The conservation needs of this species are being addressed through a Candidate Conservation Agreement with Assurances which covers an area on the Ocmulgee River between Lloyd Shoals Dam and the low-head dam at Juliette, Georgia. The state threatened Altamaha shiner (Cyprinella xaenura), the state rare goldstripe darter (Etheostoma parvipinne), and the spotted turtle (Clemys guttata) are listed as occurring in Bibb and Twiggs Counties, but it is unknown whether these are found in the study area (USFWS 2009). The Altamaha arc mussel (Alasmidonta arcula) is listed as threatened by the State of Georgia and is also likely to be found in the area, assuming appropriate habitat exists (USFWS 2009).

As of 2017, no threatened or endangered animal species are found on Robins Air Force Base, although the base does provide habitat that would be listed for at least transient occurrences of some listed animal species (USAF 2017). Several species of concern nest on the base, including Swainson’s warbler, prothonotary warbler, and loggerhead shrike (GA DNR 2021).
Chapters 3 through 5 present the evaluation of the criteria that must be met for a study area to be considered for designation as a national park unit. The application of these criteria follows agency and legislated guidance outlined in NPS Management Policies 2006 Section 1.3 Criteria for Inclusion (see appendix B of this study for reference) as well as the National Park System New Areas Studies Act (Title III of the National Parks Omnibus Management Act of 1988, PL 105-391; 54 US Code 1005007). For a study area to be considered for designation as a potential new unit of the national park system, it must fully meet the following four criteria for evaluation:

1. possess nationally significant resources,
2. be a suitable addition to the system,
3. be a feasible addition to the system, and
4. require direct NPS management or administration instead of alternative protection by other agencies or the private sector.

These four criteria are analyzed sequentially, and there are several pathways for concluding the study process based on individual criteria findings. The findings presented in this and following chapters will serve as the basis for a formal recommendation from the Secretary of the Interior to Congress on whether or not the study area should be designated as a new unit of the National Park Service.

**EVALUATION OF NATIONAL SIGNIFICANCE: CULTURAL RESOURCES**

NPS Management Policies 2006, section 1.3.1, directs that proposed additions to the national park system must possess significance at the national level.

For cultural resources, national significance is evaluated by applying the National Historic Landmark (NHL) nomination criteria contained in 36 CFR Part 65.5.

The quality of national significance can be ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation’s heritage.
NPS Management Policies 2006 provides that a resource will be considered nationally significant if it meets the following four criteria:

1. It is an outstanding example of a particular type of resource.
2. It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation’s heritage.
3. It offers superlative opportunities for public enjoyment or scientific study.
4. It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of the resource.

In addition to the four standards, nationally significant cultural resources must also satisfy at least one of the six following National Historic Landmark criteria:

**Criterion 1:** be associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of US history and from which an understanding and appreciation of the patterns may be gained; or

**Criterion 2:** be associated importantly with the lives of persons nationally significant in the history of the United States; or

**Criterion 3:** represent some great idea or ideals of the American people; or

**Criterion 4:** embody the distinguishing characteristics or an architectural type specimen exceptionally valuable for the study of a period, style, or method of construction, or represent a significant, distinct, and exceptional entity whose components may lack individual distinction; or

**Criterion 5:** be composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity or exceptional historic or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or

**Criterion 6:** have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation of large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts, and ideas to a major degree.

The use of the NHL criteria to determine national significance is the only link between the special resource study process and the NHL program regulations. Usage of these criteria does not confer landmark designation; separate designation processes, governed by other regulations, exist for the NHL program.

### Methodology

Cultural resources in the river corridor were identified in 2020 and 2021 via research by the study team and through meetings with tribal leaders and state and federal public land managers. Additional resources were identified through information provided by the US Air Force, conservation partners, scholars, and the public. Tribal representatives from the Coushatta Tribe of Louisiana, the Muscogee (Creek) Nation, and Seminole Tribe of Florida provided early comments in April of 2020, and representatives from the Muscogee (Creek) Nation and Seminole Tribe of Florida continued to engage with the study team.
During these meetings, the study area boundary was adjusted to incorporate resources that these groups and individuals identified as possessing significance. Participants in these meetings also suggested that the study consider themes relating to the precontact period of the Southeast, the contact period between Native Americans and Europeans, European exploration, European American westward expansion, warfare, and economic growth, Creek heritage, homelands, and culture, the Indian Removal period, trade and commerce, the Civil War and Reconstruction, World War I and II, the Great Depression and Federal Work Program Archeology, trails and recreation areas, and continued archeological discovery. The historic and cultural context narrative in chapter 2 was written with these themes in mind and included other themes identified by the study team.

While the study team broadly explored the study area’s historic context, discussions continued with representatives of tribal nations, the National Park Service’s regional office, Washington offices, and the Southeast Archeological Center to begin developing an evaluation of national significance. The study area contains no resources already designated as a National Historic Landmark, so the team collaborated to determine what currently unevaluated resources could meet requirements for national significance (i.e., could potentially meet the criteria for NHL status). Stakeholders and the public frequently noted that the cultural resources and natural resources within the Ocmulgee River corridor are inextricably intertwined, such that the cultural resources cannot be understood in isolation from the natural landscape of which they are an integrated part. With this idea in mind, the study team worked toward identifying and defining a historic district that would encompass the various resource types being evaluated for NHL eligibility.

The team also sought to identify a justifiable boundary and a working name for this historic district.

Out of all of the topics covered in the historic context narrative, one stood out as potentially meeting NHL criteria for national significance: The historic impact of federal “New Deal” archeological research projects on the field and science of American archeology. The research that occurred in the Ocmulgee River corridor during the Great Depression—and the ongoing (and changing) understanding of southeastern history and Creek heritage that came from those projects—continue to be refined and developed to this day. The science and techniques developed during the New Deal excavations, as well as the passage of various laws associated with cultural resource protection throughout the 20th century (e.g., Antiquities Act of 1906, the Native American Graves Protection and Repatriation Act [NAGPRA] of 1990, National Historic Preservation Act of 1966, the Archeological Resources Protection Act of 1979) eventually led to the development of the field of modern cultural resource management. But while New Deal archeology resources are the primary resources that meet NHL criteria for national significance, the full significance of these resources can only be understood in the context of Creek history and the cultural heritage of descendant Creek peoples. Today, the science of American archeology and modern cultural resource management owes much to the work of the New Deal programs, but the conclusions of that program are incomplete and continue to be refined and challenged. Indeed, a common and significant observation on these historic programs is that they take a Eurocentric approach to the study of the past.
Figure 2. Boundary of the Ocmulgee River Corridor Cultural and Archeological District
During the New Deal programs, Creek ancestors, sacred sites, and objects of cultural patrimony were disturbed, removed, and dishonored; many remains and objects ended up in museums, continuing a tradition of European colonization and cultural decimation spanning several centuries. Much opportunity now exists for modern investigations of New Deal and associated sites to incorporate the traditional knowledge, perspectives, and worldviews of native descendant people, all of which can lead to new information, interpretation, and understanding of our nation’s history.

Based on the historic context research, the existing documentation identifying ethnographic resources (such as for the Ocmulgee Old Fields traditional cultural property nomination); available information on the natural landscape of the study area (particularly an intact wildlife corridor that corresponds to a cultural landscape); comments received from the general public; and discussions with tribal leaders, stakeholders, and scholars, a conceptual boundary for a historic district was determined. The historic district includes the Ocmulgee Old Fields traditional cultural property, Ocmulgee Mounds National Historical Park, archeological excavation sites of the New Deal era, ethnographic resources, the cultural landscape of the river corridor, and additional high-integrity archeological sites. These resources retain the potential to further enlighten the scientific study of the field of archeology born of the New Deal programs, while broadening that understanding by incorporating traditional knowledge, new archeological techniques, and tribal insight. The title of this special resource study’s historic district is the “Ocmulgee River Corridor Cultural and Archeological District” (figure 2).

Evaluation of NHL Criterion 1: The Contribution of the New Deal Projects of the Ocmulgee River Corridor to the History of American Archeology

Background of New Deal Archeology Programs

With the crash of the stock market in 1929, the United States entered the Great Depression and an extended period of unemployment and suffering for American citizens. During the 1932 presidential contest between incumbent President Herbert Hoover and Democratic challenger, Franklin Delano Roosevelt, Roosevelt ran on a platform that sought the expansion of the federal government to resuscitate the economy, ease the suffering of the American people, and ensure that Americans had opportunities to lead successful and rewarding lives. This platform laid the foundation of what would become Roosevelt’s later New Deal programs (Leuchtenburg 2021). In 1933, President Roosevelt announced his New Deal economic policy in which the federal government established programs to alleviate economic depression and strengthen the economy by creating jobs for federal work projects and through other means (New South Associates 2018).

Starting with the establishment of the Federal Emergency Relief Administration (FERA) and ending with the dissolution of the Works Progress Administration (WPA), these New Deal programs are significant in the history of archeology in the United States. During the course of these programs, archeologists developed survey techniques to identify archeological sites across large geographic areas in a short period of time and the federal government recognized the impact of its projects on archeological resources and assumed responsibility for mitigation.
The spectrum of activities during this period led to the field of cultural resource management, producing a new area of professional development in the field of archeology (Roller and Moyer 2020). The New Deal programs which supported archeological excavations at a national level include the Civilian Conservation Corps (CCC), Federal Emergency Relief Administration (FERA), Civil Works Administration (CWA), and Works Progress Administration/Works Projects Administration.

**Emergency Conservation Work/Civilian Conservation Corps**

In operation nationally from April 5, 1933 to July 2, 1942, the Emergency Conservation Work (ECW), as it was known officially until 1937 when its name changed to the Civilian Conservation Corps, was the signature relief program set up by President Roosevelt. Emergency Conservation Work/Civilian Conservation Corps recruits, single men between 18 and 25 years old, were put to work on the nation’s infrastructure, building roads, parks, bridges, campsites, schools, and other recreational elements, while also trying to balance development and conservation. Much of the early infrastructure in the national parks and in state parks was constructed by this group. Emergency Conservation Work/CCC recruits also worked in forest fire prevention on federal land and insect and fungus control in federal forests (Roller and Moyer 2020; Means 2013; Paige 1985).

With the transfer of 47 properties from the War Department to the National Park Service in 1933, the National Park Service began to hire ECW/CCC recruits with backgrounds in history and archeology. These ECW/CCC recruits conducted extensive historical research to complete historical reconstruction, restoration, and reproduction projects, archeological investigations, and artifact analysis, and write interpretive guides. The parks that benefited from these ECW/CCC recruits with backgrounds in history and archeology were Morristown National Historical Park (beginning in 1933) and Chickamauga and Chattanooga National Military Park, Colonial National Monument, Grand Canyon National Park, Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park, Petersburg National Battlefield, Shiloh National Military Park, and Vicksburg National Military Park (beginning in 1934). More parks received support by ECW/CCC recruits as the National Park Service began to organize itself in different ways, including Ocmulgee National Monument (as it was then known) (Roller and Moyer 2020; Paige 1985).

**Federal Emergency Relief Administration**

Established in May 1933 through the Federal Emergency Relief Act and active nationally through May 1935, the Federal Emergency Relief Administration was President Roosevelt’s first initiative to combat the adverse economic and social effects of the Great Depression. The relief administration took on the responsibilities of the Emergency Relief Administration established under President Herbert Hoover but gave the federal government a more centralized role in the economic recovery and assumed oversight of existing state-level relief programs (Roller and Moyer 2020; Means 2013; Deeben 2012).

In addition to assuming state oversight, the Federal Emergency Relief Administration provided work opportunities for unemployed persons, with a broader application than that offered by the ECW/Civilian Conservation Corps. The relief administration served as the clearinghouse for information on relief problems, policies, and procedures and was divided into several divisions that focused on work, rural rehabilitation, research, statistics, finance, and relations with states.
One component of the FERA program was the temporary Civil Works Administration (CWA) (1933–1934). Before the program ended, FERA recruits were responsible for the first federally funded work relief archeology project at the Marksville Prehistoric Indian Site (see the comparative analysis section below). (Roller and Moyer 2020; Means 2013; Deeben 2012).

The passage of the Emergency Relief Appropriate Act on May 6, 1935, ended the Federal Emergency Relief Administration and shifted the direct economic relief to enhanced work relief. The act implemented a massive public works program under the direction of the Works Progress Administration (Deeben 2012).

Civil Works Administration

This temporary agency under the Federal Emergency Relief Administration was established on November 9, 1933, and disbanded on March 31, 1934, for the express purpose of giving extra support to citizens during the harsh winter of 1933–1934. The Civil Works Administration enrolled men and women and put millions of unemployed people back to work building/improving roadways, schools, playgrounds, airports, laying sewer pipes and masonry walls, raking leaves, shoveling snow in public and national parks, and sewing garments. In January 1934, the Civil Works Administration employed approximately four million people (Roller and Moyer 2020; Means 2013; Deeben 2012).

Works Progress Administration/Work Projects Administration

The program, established on April 8, 1935, and running through June 30, 1943, was the principal work relief program of the New Deal. The Works Progress Administration superseded the Federal Emergency Relief Administration, assuming all FERA functions, and provided an even more comprehensive and broad-reaching administration. The Works Progress Administration employed more than eight million people on nearly 1.5 million projects and created projects for professionals and artisans, such as the Federal Arts Project, the Federal Writers Project, and the Federal Theater Project, as well as unskilled laborers (Roller and Moyer 2020; Means 2013; Deeben 2012).

With most WPA recruits untrained in archeology, supervisory archeologists developed standardized surveying and sampling methods in the field, preprinted forms for field documentation, and standardized methods for artifact processing and analysis in the laboratory. By 1938, the Works Progress Administration was restructured, and archeological projects shifted their focus from excavation and data recovery to laboratory analysis and publication. The data collected during these WPA projects contributed to the development of regional chronologies, expanded disciplinary understanding of time, and changed and shifted paradigms from a static past to exploring dynamic processes (Roller and Moyer 2020; Deeben 2012).

The WPA projects led to the rapid professionalization and popularization of archeology. The projects generated standardized practices that have continued today, launched the careers of many archeologists, and introduced a large fraction of the US population to the field of archeology. The increased interest in, and visibility of, archeology during the New Deal led to public interest in the preservation of archeology sites.

In 1939, the Works Progress Administration was renamed the Work Projects Administration, and the archeological projects were impacted by the emphasis on national defense with the outbreak of World War II. In 1942, the WPA archeological projects were dismantled (Roller and Moyer 2020).
These New Deal archeology programs developed from the foundation laid by National Research Council and its Committee on State Archaeological Surveys, which was established in 1920. The committee encouraged and assisted states with surveying their archeological resources as a way to establish baseline data in order to determine the level of destruction that amateur archeological societies were having on those resources. The committee also established a national dialogue among archeologists and sponsored regional conferences. By 1932, there was little understanding of the archeological resources present in the Southeast region of the United States and little communication among archeologists working there. Without the organizing and advocacy of the Committee on State Archaeological Surveys, New Deal archeology would not have been ready when appropriations were secured for funding. The Committee on State Archaeological Surveys was disbanded in 1934 as the federal government was directly involved with archeology through the New Deal programs (Means 2013).

New Deal Archeology Programs within the Ocmulgee River Corridor

New Deal archeology programs within the Ocmulgee River Corridor Cultural and Archeological District were supported by previous programs and advocacy in the area. The programs were brought in as the result of local interest in the mounds in the area, known as the Ocmulgee Old Fields (the Macon Plateau [9BI1] and Lamar Village [9BI2] sites). Prominent Macon attorney and amateur archeologist General Walter A. Harris had written to the Bureau of American Ethnology in 1922 expressing interest in purchasing the mounds and again in 1929 suggesting that the City of Macon fund excavations directed by Smithsonian archeologists.

Three years later, though no excavations had started, the Society for Georgia Archaeology was established, and Dr. Charles C. Harrold and Linton M. Solomon were elected as president and secretary, respectively. Harris served as executive committee chairman. By November 1933, Harris, Harrold, and the Macon Junior Chamber of Commerce had acquired options to purchase Mound A (on the Macon Plateau [9BI1] site and other mounds. In December 1933, Harrold was informed that the Ocmulgee mounds were approved for CWA funding (Walker 1994).

Within the Ocmulgee River Corridor Cultural and Archeological District, New Deal archeological investigations began in 1933 and continued with only brief interruptions for the next nine years until 1942 (Walker 1994). The first excavations were conducted with CWA funding at the Macon Plateau (9BI1) and Lamar Village (9BI2) sites (December 1933–March 31, 1934) under the direction of Arthur R. Kelly, with the assistance of James A. Ford. Kelly had trained at Harvard, taught at the University of Illinois, and was the director of the Illinois Archaeological Society, where he conducted fieldwork at Cahokia (NHL designation July 19, 1964), Starved Rock (NHL designation October 9, 1960) and Fountain Bluff. Ford, meanwhile, was an undergraduate student who had previous experience excavating, working for the Smithsonian, and assisting and managing the CWA excavations at Marksville in Louisiana (Walker 1994; Setzler 1935).
The nine-week CWA archeological excavations ended on February 15, but the City of Macon requested continuance of the excavations. The excavations resumed on February 19, and although funding by the Civil Works Administration ended on March 31, 1934, new funding began under the Federal Emergency Relief Administration on April 4, 1934 (Bigman 2012).

Around this same time, Georgia Representative Carl Vinson introduced a bill (February 5, 1934), seeking appropriations to acquire 2,000 acres near Macon for the development of a national park to be known as the Old Ocmulgee Fields (Walker 1994). Investigations at these mounds (Mounds A, C, D, and the Earth Lodge at the Macon Plateau site [9BI1] and Mound A and a low house platform at the Lamar Village site [BI2]) were sponsored by the Civil Works Administration beginning in December 1933 and proceeded under the direction of Arthur R. Kelly and his assistant James A. Ford. Civil Works Administration workers labored on a two-shift day, six-day/week schedule, and night classes were offered in archeology, with those newly trained workers put in trained positions. By mid-January 1934, there were 274 CWA recruits working on the investigations (Bigman 2012; Walker 1994). The site ended up being larger and more complex than Kelly and Ford anticipated (Roller and Moyer 2020).

The CWA project funding ended on February 15, 1934, and all of the workers were laid off. The city requested continuance of the project, and the project resumed on February 19 (Walker 1994). Funding by the CWA ended on March 31, 1934, but new funding began under the Federal Emergency Relief Administration (Bigman 2012).
Kelly and Ford’s field techniques, which included specific workers for specific tasks such as recording postholes, cataloging artifacts, taking fieldnotes, and taking photographs, were praised for the quality of their documentation which yielded significant information about the precontact period of Georgia. (Roller and Moyer 2020; Walker 1994)

*The Federal Emergency Relief Administration within the Ocmulgee River Corridor Cultural and Archeological District*

Federal Emergency Relief Administration funding began for the archeological investigations at the Ocmulgee Mounds in 1934, after the CWA funding ended. Arthur R. Kelly continued directing the excavations, and Ford began supervising the work around Mound D and the Earth Lodge on the Macon Plateau (9BI1). Public interest was also growing in the excavations, and a replica of the Earth Lodge was made to be displayed in the Georgia booth at the 1933–1934 Chicago World’s Fair, “A Center of Progress International Exposition.” Neither images of this exhibit nor the exhibit itself survives today. An oil painting of the multicolored profile of Mound C was made by Carolyn Smith Meriwether when photographs failed to capture the vibrant colors, and the painting was exhibited in Macon and then the Smithsonian (Day and Klingelhofer 2019; NPS MMP 2016; Gleisten 2002; Walker 1994).

This painting can be viewed today at the park’s visitor center. In May 1934, Ford left the excavations in the Ocmulgee River corridor to support other archeological projects in Georgia (Walker 1994).

In June of 1934, the citizens of Macon began a campaign to purchase 2,000 acres for the establishment of a national park, and nine days later Congress authorized the establishment of Ocmulgee National Monument. The area would be made a national monument through presidential proclamation when adequate lands had been donated. President Roosevelt’s Presidential Proclamation to create the monument would come two years later in 1936 (Walker 1994).

Excavations continued in 1934 on the Macon Plateau (9BI1), including Mound E and other features in the landscape, which were thought to be borrow pits, fortification trenches, or even subterranean house sites. Excavations also started at the Mile Track (9BI7) site in Macon. By 1935, excavations had also started at Napier site (9BI9), the Deer Park site (9BI8), and the Horseshoe Bend site (9BI10). These excavations continued with WPA funding (Walker 1994).

*The Works Progress Administration within the Ocmulgee River Corridor Cultural and Archeological District*

Federal Emergency Relief Administration funding ended on May 6, 1935, and WPA funding began on April 8, 1935. Between these two programs, there were already a number of excavations underway within the Ocmulgee River corridor. A new excavation, that of the rock shelter known as Shell Rock Cave (9BI6), began in July 1935, and new areas were explored on the Macon Plateau (9BI1), such as the trading post and the McDougal and Dunlap Mounds. In July 1935, the excavations employed 700–800 laborers.
These laborers were mostly men, as WPA rules specified that no more than one family member could be enrolled. However, approximately 160 African American women qualified for WPA employment in the late 1930s, and these women were the total labor force at the Swift Creek site (9BI3) and the Irene site. Ford remained as Kelly’s only assistant until 1936 (Roller and Moyer 2020; Bigman 2012; Walker 1994; Claassen 1994, 1993).

By late 1935, Kelly had recognized four “cultural complexes” at the Macon Plateau (9BI1) and Lamar Village (9BI2) sites. These four complexes were Swift Creek, Macon Plateau, Lamar, and historic Creek. Kelly also recognized two other pottery types, Napier Complicated Stamped and Deptford Check Stamped, but he did not know their chronological positions. Ceramic classification work continued through 1936, with the classification codes developed by James B. Griffin (Walker 1994).

During this time, land acquisition continued for the establishment of the national park, and in early 1936, H. Summerfield Day, an NPS archeologist working at Jamestown, visited the Macon Plateau (9BI1) and Lamar Village (9BI2) sites at the request of Kelly. Day made suggestions for the future development of the park, including reconstructing the Earth Lodge and trading post stockade, building shelters to cover exposed excavations, constructing a museum, and assigning an NPS archeologist to the future park. Around the time of Day’s visit to the Ocmulgee River corridor, Kelly was made aware of the date associated with the trading post and its connection to Creek history by John R. Swanton, who was considered the preeminent authority in Creek ethnohistory (Walker 1994).

By late March of 1936, excavation began at the Swift Creek site (9BI3), and the project was set up to employ 30–40 African American women who were first employed as excavators at the site (White, Marrinan, and Davis 1994; Claassen 1993). These women were supervised by men who had been trained by Kelly and Ford, Joseph Tamplin, Joseph Coke, James Jackson, and Hugh Hanna. By June of 1936, other graduate students arrived to assist Kelly in the excavations. These graduate students were Gordon R. Willey, Walter W. Taylor Jr., J. Lawrence Angel, Joseph Birdsell, Charles Wagley, and Han-Yi Feng. These new assistants worked on the Earth Lodge, Adkins Mound (9BI4), and Stubbs Mound (9BI12) until their program ended on August 28, 1935. Kelly asked Willey to stay on as his assistant, and Willey continued work on Stubbs Mound and started excavations at Fort Hawkins (9BI21). Willey also began collecting dendrochronology samples by October 1936 (Walker 1994).

On December 23, 1936, Ocmulgee National Monument was established through presidential proclamation. James T. Swanson, an NPS architect who had directed the start of the restoration of the Earth Lodge a few days before, was named acting superintendent of the national monument. Kelly was made archeologist and Willey was made assistant archeologist for WPA projects (Walker 1994).

The WPA recruits were withdrawn on in June 1937 and replaced by a smaller number of CCC recruits who were to focus on park development projects. However, on March 13, 1938, in the midst of the CCC period, over 100 WPA workers were assigned to Ocmulgee National Monument for three months to work on sites on the Macon Plateau and catalog artifacts in the laboratory (Walker 1994).
Finally, other WPA-funded archeological projects occurred, and some of the archeologists from these other projects visited the Ocmulgee River corridor and supported the efforts there. Some of these visitors included Robert Wauchope, who was involved with the Works Progress Administration–University of Georgia archeological survey of northern Georgia (Walker 1994). These visitors to the Ocmulgee River corridor were supported financially by the same federal relief funds and the interaction of the archeologists lead to developments in archeological theory and practices, beyond the corridor itself.

The Civilian Conservation Corps within the Ocmulgee River Corridor Cultural and Archeological District

In 1937, CCC camp was established at Ocmulgee National Monument for the primary purpose of park development. These CCC recruits were assigned to three major duties: park construction, restoration of the Earth Lodge, and archeological investigations. Civilian Conservation Corps recruits and a reduced force of WPA recruits reconstructed the Earth Lodge under Acting Superintendent Swanson’s direction. Ford returned to the excavations from May to September 1937, with the exception for a few weeks in Chaco Canyon, as a consultant for the reconstruction of the Earth Lodge interior (Walker 1994; Paige 1985).

Kelly learned that the WPA workforce would be withdrawn on June 1, 1937, and only a few CCC recruits would be available for continuing the large-scale excavations. Kelly and Willey, therefore, changed their strategy from large-scale excavations to smaller stratigraphic testing on more sites. Kelly was named project superintendent for the CCC camp (Walker 1994), and Willey was selected as the senior foreman archeologist (Bigman 2012; Walker 1994). Stratigraphic testing began on June 7 in the Ocmulgee River bottoms near Mound A. Other sites that were tested in 1937 as part Willey’s CCC stratigraphic survey included sites on the Macon Plateau (9BI1), Lamar Village (9Bi2), Mossy Oak (9Bi11), Hawkins Point (9BI15), Napier, Tuft Springs Number 2 (9BI19), Cowarts Landing (9BI14), Scott (BI16), and sites in Butts and Wilkinson Counties. In 1938, Willey returned for additional testing at Swift Creek and Stubbs Mound (Walker 1994).

From 1937 to 1938, Kelly, Ford, Griffin, Willey, Preston Holder, William G. Haag, Joffre L. Coe, and Charles H. Fairbanks began working on developing a typology for southeastern ceramics. Preliminary and summary reports also began to be published. A quick succession of acting superintendents occurred at the national monument when Frank Lester replaced Swanson on February 16, 1938, and Jesse D. Jennings replaced Lester on April 10. Willey remained senior foreman archeologist until September 1938, when he left Georgia to head the WPA archeological laboratory at Louisiana State University under the direction for Ford. Willey was replaced by Charles H. Fairbanks, who had assisted Charles H. Nash in excavations at Hiwassee Island. Fairbanks began an analysis of the materials excavated from the Macon Plateau.
Other sporadic excavations occurred from 1938 to 1939, including work on the Macon Plateau to find burials for in situ display, at the Hartford Mound site (9PU1) in 1940, and at the Lamar village site through March 1941 (Bigman 2012; Walker 1994). During the excavation of the Lamar stockade, archeologists learned that the Lamar site extended beyond the national monument’s boundaries (Walker 1994).

Archeological work within the Ocmulgee River corridor experienced significant changes during 1941–1942, including personnel changes, land additions to the national monument, the United States’ engagement in World War II, and subsequently, the reprioritization of CCC efforts. Karl Schmitt replaced Fairbanks as the CCC senior foreman archeologist on April 16, 1941, but both continued giving papers on the excavations. Excavations and in situ burial-structure construction continued on the Macon Plateau, and continuing excavations at the Lamar village site led to a boundary expansion of the national monument. Five acres were added to Ocmulgee National Monument through donation and presidential proclamation in June 1941, bringing the entire Lamar site under federal protection. By November of 1941, all work relief projects stopped, except for work on the Mound C shelter at the Macon Plateau site, which continued after December 7, the day of the Pearl Harbor attacks (Walker 1994).

Civilian Conservation Corps recruits were reassigned to defense-related jobs as the United States entered World War II. Work ceased on the Mound C shelter in January or February 1942. The CCC recruits instead began constructing Camp Wheeler, an army post near the Lamar village site. The post was placed on top of the Swift Creek site, destroying Mound B and more than half of Mound A. In March of 1942, the CCC camp was removed from NPS jurisdiction and Schmitt resigned.

Archeological fieldwork and park development were halted by the war and the end of the New Deal program funding (Walker 1994).

**Lasting Changes to American Archeology**

The New Deal archeological excavations with the Ocmulgee River corridor were the largest New Deal archeological excavations in American history, at a scale that was unprecedented elsewhere in the United States. An estimated 2.4 million artifacts were recovered, with many of these artifacts still being analyzed today. The excavations used a labor force of more than 800 people who were enrolled in several different federal programs over a nine-year period (1933–1942). The excavations revolutionized American archeology by introducing standardized field and laboratory practices, stratigraphic control, expanded chronologies, lithic and ceramic seriation, and advances in archeological theory by shifting the research focus from single sites to regional and national level comparisons. The excavations also inspired public interest in archeology, as witnessed by the inclusion of the excavations at the 1933–1934 Chicago World’s Fair (“A Center of Progress International Exposition”) and the inclusion of archeology in tourism brochures. Finally, the Macon Plateau (9BI1) and Lamar (9BI2) sites were recognized for their national significance and archeological resources, which served as the basis for the creation of Ocmulgee National Monument (precursor to today’s Ocmulgee Mounds National Historical Park), established by President Roosevelt with a presidential proclamation in 1936 (Roller and Moyer 2020; Day and Klingelhofer 2019; NPS 2019; New South Associates 2020, 2018; Pauketat and Alt 2015; Andrews, Collings, and Lee 2014; Means 2013; Schroeder 2013; Hammack 2008; Wheeler 2007; Gleisten 2002; Walker 1994, Waselkov 1994; Marsh 1986a, 1986b; Lyon 1982; Setzler 1935).
Most of the New Deal excavations within the Ocmulgee River corridor were overseen by Arthur R. Kelly, a professional archeologist who was director of excavations until August 1938, when he left Macon to work at Chaco Canyon. Kelly was assisted by James A. Ford, who went on to direct some of the excavations, as well as Jesse D. Jennings, Gordon R. Willey, and Charles H. Fairbanks, who went on to have careers elsewhere. The New Deal excavations themselves changed the way that archeological excavation was conducted in the United States and created a vast knowledge base of southeastern archeology, which had not been thoroughly investigated before.

While preliminary reports were published during the New Deal excavations themselves, comprehensive reporting did not occur until the 1970s. Walker (1994) identifies 17 reports, starting in the 1970s, as relating to the New Deal excavations in Georgia and 13 of these 17 document sites contained within this national significance evaluation. Since 1994, research on the New Deal project has continued, including the publication of formerly incomplete manuscripts by the New Deal archeologists, such as Arthur Kelly’s 2010 report *WPA Archaeological Excavations at the Macon North Plateau*, published by the Lamar Institute (Roller and Moyer 2020; Day and Klingelhofer 2019; NPS 2019; New South Associates 2020, 2018; Andrews, Collings, and Lee 2014; Means 2013; Schroeder 2013; Bigman 2012; Kelly 2010; Hammack 2008; Wheeler 2007; Walker 1994; Waselkov 1994; Marsh 1986a, 1986b).

Since many of the laborers were untrained, standardized procedures, forms, and survey techniques were developed to make sure information was recorded consistently. Preprinted unit, feature, and burial forms became widespread for the first time (Means 2013; Schroeder 2013). Grid systems with standardized square units were employed in surveying, mapping, trenching, and excavating sites.

Making detailed maps and photography were used as standard recording techniques. Stratigraphic excavation, which emphasized vertical control and was not widely employed in the South before the 1930s, was also standardized during the excavation. In turn, stratigraphic excavation aided in establishing relative chronologies of the cultural sequences at the sites themselves, the larger region, and with comparative sites in other states. In the laboratory, artifacts were carefully cataloged, and field specimen numbers were keyed with systematic provenience to maintain the details of the artifacts’ location and context after being removed (New South Associates 2020; Roller and Moyer 2020; Day and Klingelhofer 2019; NPS 2019; New South Associates 2018; Anderson, Smallwood, and Miller 2015; Means 2013; Schroeder 2013; Wheeler 2007; Williams and Thompson 1999; Walker 1994; Waselkov 1994).

The New Deal archeology research focused not just on mounds, but on entire sites, including several type-sites such as Lamar (9BI2), Swift Creek (9BI3), Napier (9BI9), Mossy Oak (9BI11) (Roller and Moyer 2020; New South Associates 2020, 2018; Zainaldin 2016; Andrews, Collings, and Lee 2014; Mazzari 2004; Means 2013; Marsh 1998; Steinen 1995; Claassen 1993). This landscape-level research made room for the consideration of settlement patterns and site plans and the documentation of houses, storage pits, and related features. The research resulted in the first major archeological syntheses east of the Mississippi River, and with this baseline synthesis, new holistic and dynamic research questions were asked. New interpretations of cultural change and continuity were explored. Many of these excavation and laboratory techniques persist today, and archeological theory and practice continues to evolve with new research questions and new technology.
During the course of the New Deal excavations, archeology shifted from an avocation to a vocation and provided night class training in archeology for some CWA workers. The standardization of field and laboratory practices professionalized the field, and the archeologists working at Ocmulgee pushed for a national program of conservation. Some of this conservation push was due to public interest in archeology. A further impetus was the economic boom and multiple infrastructure projects brought on by World War II, as these projects had the potential to impact archeological sites. The federal government, recognizing these impacts, assumed responsibility for impact mitigation, thus leading to the birth of professional cultural resource management (New South Associates 2020; Roller and Moyer 2020; Day and Klingelhofer 2019; NPS 2019; New South Associates 2018; Anderson, Smallwood, and Miller 2015; Means 2013; Schroeder 2013; Wheeler 2007; Williams and Thompson 1999; Walker 1994; Waselkov 1994).

The extensive New Deal excavations in Georgia, though concentrated in the Ocmulgee River corridor, inspired a new interest in understanding Native peoples throughout the southeastern United States and the 17,000-year continuum of human occupation in the area. The excavations also focused attention on the lifeways of precontact peoples, which had only been conjectural up to that point. The excavations provided a wealth of information on the Mississippian period mound complex, which, up to the 1930s and 1940s, was not widely recognized or researched by archeologists and historians. Only limited studies had occurred on the Mississippian period up to the New Deal excavations. These excavations spurred further research, ultimately changing what was known to European American researchers about these early peoples (Roller and Moyer 2020; Day and Klingelhofer 2019; Andrews, Collings, and Lee 2014; Means 2013; Waselkov 1994; Marsh 1986b).

While the excavations fundamentally changed the field of archeology in the United States, they also disturbed and removed the ancestors of descendant Creek peoples and dispersed sacred objects and other objects of cultural patrimony without consent or consultation. As such, the excavations were also a desecration of Native Americans’ ancestors, culture, and important places. There were other archeological excavations elsewhere in the United States, and cumulatively in the 20th century, over 600,000 Native American ancestors were removed from their final resting places. These human remains have variously been lost, destroyed, held in private collections, or held in museum collections—including collections controlled by federal institutions. Eventually, the desired return of these ancestors and objects led to passage of the Native American Graves Protection and Repatriation Act (NAGPRA) in 1990 (PL 101-601; 25 USC 3001 et seq., 104 Stat. 3048; NPS 2016d; Grabouski 2011), but many of the New Deal collections remain in repositories waiting to be repatriated.

Implementing the Native American Graves Protection and Repatriation Act in the Southeast has been slow, and tribes have a difficult time repatriating because of a lack of effective consultation between present-day tribes and repositories with large inventories and very few NAGPRA staff. Furthermore, as Hunt (2021) notes, the Muscogee (Creek) Nation “… never ceded or consented to the exploitation of our ancestors or cultural sites in our homelands for research – we retain those intellectual property rights.”
While the harm caused by the New Deal excavations has been long-lasting, more recent events illustrate how the discipline of archeology continues to evolve. After nearly 15 years of work and consultation with tribal nations, in 2017 the National Park Service repatriated 113 individuals and returned ancestors of descendant Creek peoples to their final resting places within Ocmulgee Mounds National Historical Park (Rutland 2017). Thus, by this example, future changes to the discipline of archeology may include action that is both in compliance with federal law and honors Native American worldviews.

**Evaluation of NHL Criterion 6: The Potential of the Ocmulgee River Corridor Cultural and Archeological District to Yield New Information**

The New Deal archeological work in the Ocmulgee River corridor sought to increase understanding of the history, cultural identity, and heritage of descendant Creek people. That program of work remains fundamentally incomplete due to several factors. Much of the direct work of the New Deal era remains incomplete; large collections remain uncatalogued and unanalyzed, and reports were not written. More importantly, the program was carried out in a Eurocentric framework that did not include consent from descendant Native peoples nor traditional knowledge. The worldviews of Native peoples, whose ancestors and histories were the subject of inquiry, were not included, and therefore, the New Deal excavations are only a small part of the larger story of the Ocmulgee River corridor. Future collaboration between archeologists and descendant tribes in cultural resource management, federal undertakings, and within academia is needed to ensure that tribal history is told correctly, as some previous interpretations have been wrong and harmful.

Additionally, descendant Native communities with interests in archeology have seen benefit in applying the field of study to help Native communities repatriate dormant knowledge about their ancestors.

Furthermore, in the decades since the Great Depression, new sites have been discovered and new understanding of the historical record of the river corridor has been developed. Advances in archeological science and technique, particularly in the realm of landscape-level investigations and geophysics, can trace their history to the influence of the New Deal programs but can also now be applied to reexamine the conclusions of the New Deal program and fill gaps in the understanding of the past.

Many individual archeological sites of the Ocmulgee River Corridor Cultural and Archeological District are directly associated with the excavations of the New Deal era, but other sites, as well as ethnographic resources, are also capable of yielding new information that can further the original research focus of the New Deal work and provide opportunities to critique its conclusions and methodologies, particularly by incorporating indigenous knowledge and inclusion of Native perspectives in research. The following section provides the context needed to understand the nexus between NHL criteria 1 and 6 in the district, continues with a critique of the New Deal excavations that incorporates Native worldviews in the history of the Ocmulgee River corridor, and ends by identifying sites that are of significance to descendant Creek people with or without a direct connection to New Deal archeology.
Creek Heritage and History in the Ocmulgee River Corridor Cultural and Archeological District

The Creek Confederacy of the 17th century, which comprised the descendants of Mississippian period peoples and their complex cultures, was a diverse and dynamic political entity, dispersed across the landscape, yet unified. The Muscogee (Creek) Nation considers the Creek Confederacy to be the most sophisticated political organization in North America during the early contact period with Europeans (Muscogee [Creek] Nation 2016), and other scholarship discusses the strength and importance of the Confederacy (Ellisor 2020; Etheridge 2004; Hahn 2004; Swanton 1920; Adair 1775;). By the late 17th century, the Creek Confederacy consisted of more than 20,000 citizens of diverse ethnic backgrounds, more than 50 towns, and six distinct languages. In 1733, the Creek Confederacy was acknowledged as a powerful nation by the leading trustee of the English colony of Georgia, James Oglethorpe (Hunt 2020; Russell 2006; DeVorsey 1970; Georgia Historical Society 1920; McCain 1917; Force 1836). William Bartram, a botanist who kept a journal of his travels in the Ocmulgee River Corridor Cultural and Archeological District, wrote detailed descriptions of the Creek settlements and mounds in the area, including a description of the Ocmulgee Old Fields. He also mentioned the importance of the Ocmulgee Old Fields as being where the Creek people had made their first settlement after emigrating from the west (Bartram 1791). Some of the locations of these Creek settlements have yet to be identified.

The Creek Confederacy, and the later Creek Nation, developed a policy of neutrality toward the Spanish, French, and English, who were encroaching into Creek territory and competing for trade dominance (Tribal Consultation April 28, 2020; Hahn 2004). Not all citizens of the Creek Nation supported this position of neutrality, and some factions resisted European encroachment, while others were more open to assimilation (Bales 1998; Scott 1996; White and White 1996). By 1828, the Creek Nation had lost the Ocmulgee Old Fields, a 15-square-mile tract they had retained while the remainder of their homelands were taken via US encroachment, settler violence, and disadvantageous treaties. One of these treaties was the 1825 Treaty at Indian Springs, signed by Creek leader William McIntosh without the approval of the Creek National Council. This treaty ceded the remaining Creek land in Georgia for territory in present-day Oklahoma. Though a delegation from the Creek Nation was able to nullify the treaty in 1826 and sign the Treaty of Washington with the federal government, the ceded Creek land in Georgia was not restored (Hunt 2020; Oklahoma State Department of Education, Indian Education 2018; Haveman 2017, 2009; Pauketat and Alt 2015; Wheeler 2007; Walker 1994; Green 1982; Butler 1879). The Indian Removal Act of 1830, signed by President Andrew Jackson, forced Native Americans west in a march that has come to be known as the Trail of Tears. This forced removal resulted in the total and complete loss of Native land to the US government. Thousands of Native peoples lost their lives in this act of ethnic cleansing (Hunt 2020; Wendt 2020; Drexler 2019; Dunbar-Ortiz 2015). In Georgia, Creek peoples were forced out in 1833, with removal completed by 1838.

While being forced from their homeland, Creek ceremonial leaders gathered embers before they extinguished sacred fires in each tribal town, creating a living connection between the homelands, society, and religion in the Southeast and the new lands in the West.
Today, the layout of western town plans, town names, ceremonial places (Harjo 2019; Perez 2019; Lee 2014), ceremonial practices, and important plants (New South Associates 2020; Freeman 2019) are connected to places in the Ocmulgee River corridor. As has come down through oral histories, tribal elders encouraged their children and younger citizens to remember where they came from and to honor their heritage (Harjo 2019). The Muscogee (Creek) Nation has returned to the area with the 2019 purchase of part of Brown’s Mount (Watson 2020). Recently, Joy Harjo, the first Native American to be named poet laureate of the United States (in 2019) and a citizen of the Muscogee (Creek) Nation, spoke at Ocmulgee Mounds National Historical Park on the significance of the Ocmulgee Mounds and her ancestral home and read from her book of poetry (Ray and Smith 2021). Furthermore, current Principal Chief David Hill and former Principal Chief James R. Floyd of the Muscogee (Creek) Nation recently visited Ocmulgee Mounds National Historical Park as part of the Land and Water Conservation Fund’s efforts to protect the Lamar Mounds. They spoke about the continuing connections between descendant Creek people and the district. They also emphasized that although the Muscogee (Creek) Nation is now located in Oklahoma, descendant Creek people are still connected to the Ocmulgee River corridor for spiritual strength, cultural survival, a feeling of going home, and to share and educate about their culture (LWCF Coalition 2021).

Previous NHL theme studies, such as Contact with the Indians (no date); Early Indian Farmers and Village Communities (1963); and The Encounter Between the Old World and the New World in the Southeastern Region of the United States A.D. 1500–1830 (1992), have briefly recognized the Macon Plateau, the Creek people, and the Trail of Tears. No NHL theme study, however, has yet focused on Creek traditional homelands and Creek removal in Georgia, and the designation of the Ocmulgee River corridor would uniquely recognize Native peoples’ homelands, their survival, and their continued connection with these special places.

Nexus Between New Deal Archeology and Creek Heritage Resources

As the National Park Service entered its second century of stewardship in 2016, it issued a “Call to Action” for the next 100 years. This call to action included the National Park Service’s goal of connecting people to parks by protecting what is special to them and highlighting their history. Other announced goals were to advance the service’s education mission by providing an unbiased translation of the complexities of the American experience; to preserve America’s special places by extending the benefits of conservation across boundaries and in partnership with others; and to enhance professional and organizational excellence, in part by adapting to changing needs and encouraging organizational innovation. Within the call to action, the National Park Service stated “In our second century, we will fully represent our nation’s ethnically and culturally diverse communities. To achieve the promise of democracy, we will create and deliver activities, programs, and services that honor, examine, and interpret America’s complex heritage. By investing in the preservation, interpretation, and restoration of the parks and by extending the benefits of conservation to communities, the National Park Service will inspire a ‘more perfect union,’ offering renewed hope to each generation of Americans” (NPS 2015a). The Ocmulgee River corridor provides a fertile opportunity to advance these goals by providing a context in which New Deal archeology can be critiqued from a Creek worldview.
To represent our nation’s ethnically and culturally diverse communities more fully, the National Park Service can collaborate with descendant Creek tribes to bring a wider worldview in understanding the history of the Ocmulgee River corridor and the history of and conclusions drawn by the New Deal archeological investigations. Such a collaboration would illustrate a commitment to inclusiveness, which has been gaining momentum in recent years.

In analyzing a case study from the University of Nebraska, Lincoln, Grabouski (2011) notes that there has been a “shift from Native American bones viewed as mere scientific artifacts to a collective understanding that ancestral remains are crucial to many Native Americans’ religious and cultural practice.” This statement is similarly true for the New Deal archeology of the 1930s and 1940s, resulting in new NPS policies (NPS 2015b; DOI 2011; NPS 2006) and new scholarship trends that center Native Americans’ culture and experiences (Dunbar-Ortiz 2015; Lee 2014). The statement even applies to this special resource study, as consideration of tribal perspectives has affected how the study team has analyzed the national significance of resources within the Ocmulgee River Corridor Cultural and Archeological District. A cultural shift has also occurred in institutions across the nation, including a new awareness of Native American culture and history, an increased sensitivity to the challenges of fully understanding the history of the continent and an ongoing critique of current laws and practices (PastForward 2020; Mills and Nie 2020; Wolfley 2016). Further analysis and research into the Ocmulgee River Corridor Cultural and Archeological District could confront the legacy of New Deal archeology and incorporate Native worldviews in a new and unique way.

Critiques of the New Deal archeological excavations have additionally gained momentum in the last few years, focusing, in particular, on the disturbance of tribes’ ancestors and the lack of publications and collections analysis. Much of the New Deal excavation work is incomplete, as publishing reports was not prioritized during ongoing field work. Furthermore, the United States’ entry into World War II shifted federal priorities toward national defense, leaving these excavation reports unfunded and unfinished, even today.

Additionally, archeologists who entered military service during World War II lost interest in the research when they returned from the war (Means 2013). Completing the analysis of these items and publishing reports on these excavations could allow for new understanding of the sites and the items in museum storage. An example of this is the 2010 publication of Arthur Kelly’s *WPA Archaeological Excavations at the Macon North Plateau*. Within this same document Mark Williams, the author of the introduction, discusses a personal conversation he had with Kelly in 1974 as Williams was working on a publication on the excavations at the North Plateau. At that time, Kelly mentioned to Williams that he had already written a manuscript on the North Plateau excavations. Williams, however, did not find that manuscript until 2009 and posthumously published it noting that “it is a useful contribution to the study of the archaeology of the Macon Plateau site” (Williams in Kelly 2010, page 2). Completing other analysis and reports would likely also contribute to the understanding of the site.

These critiques feed into dilemmas in enforcing the Native American Graves Protection and Repatriation Act, since tribes can only request items that are reported.
When museums and federal institutions do not have a basic inventory or analysis of their New Deal archeological collections, these institutions cannot support the repatriation process, which leaves tribes unable to retrieve their ancestors’ remains and cultural objects. While federal institutions can be penalized for withholding artifacts from the repatriation process, there is no investigative authority associated with NAGPRA to correct a lack of cataloging and analysis (Grabouski 2011). Additionally, in some instances in which institutions work to comply with NAGPRA, the institutions must return to the New Deal archeology records, which are incomplete (Means 2013). As noted above, corrections to these challenges are ongoing (e.g., completing collection analysis and reports, working with tribal nations to repatriate their ancestors), and the progress made thus far at Ocmulgee Mounds National Historical Park can serve as an example for progress elsewhere.

Issues of analysis and access are also present for objects and artifacts collected from the New Deal archeological sites. In 1972–1973, the majority of the collection from the New Deal excavations at Ocmulgee, together with the original documentation, were moved to the curatorial facilities at the NPS Southeast Archeological Center in Tallahassee, Florida. Twenty years later (1991–1993), the human remains at the Southeast Archeological Center, which included human remains from Ocmulgee, were analyzed to comply with the Native American Graves Protection and Repatriation Act. Many of the human remains from the New Deal excavations at Ocmulgee and nearby sites are, however, curated at the Smithsonian Institution’s Museum of Natural History. Artifacts (mainly ceramics) were sent to various institutions and individuals for typology studies, and it is assumed that these artifacts were never returned.

Finally, as Ocmulgee’s 2010 collection management plan notes, the backlog for archeological cataloging from Ocmulgee is the largest in the NPS system. The plan estimated that it would take more than 80 years for the archeological collection to be completely cataloged. Despite all of this, the collection and original documentation is remarkably intact (NPS 2010), but these issues limit tribal access to their ancestors’ cultural objects, their understanding of their heritage, and the potential contribution the collection could make to understanding American history. Ongoing cataloging of New Deal projects will continue, and opportunities will arise for new insights and research opportunities during this process. Reexamination of these collections and projects, with an eye towards the larger landscape of archeological sites, the cultural landscape, and the traditional knowledge represented in the Ocmulgee River Corridor Cultural and Archeological District, will provide a valuable critique of the conclusions of the New Deal-era research and create a more inclusive understanding of America’s past.

Furthermore, some of these New Deal archeology sites would further support the theme of Creek heritage if descendant Creek people were included in interpreting these sites and archeological collections, which are understudied and underpublished. With the inclusion of Creek descendants’ worldview, new questions could lead to new understanding about the precontact period of the United States, the federal government’s treatment of Native peoples, and possible new paths forward to understand our shared history.
Individual Archeological Sites of the Ocmulgee River Corridor Cultural and Archeological District Contributing to National Significance under Criterion 1 and Criterion 6

The following section provides descriptions of individual archeological and cultural sites that contribute to the significance of the Ocmulgee River Corridor Cultural and Archeological District under criterion 1 and in some cases, potentially under criterion 6, as well. Table 1 also provides a summary of this list of resources.

Macon Plateau: Ocmulgee Mounds National Historical Park

The archeological sites of the Macon Plateau represent the long history of human occupation of the area and include the Great Temple Mound (Mound A), Lesser Temple Mound (Mound B), Funeral Mound (Mound C), Cornfield Mound (Mound D), McDougal Mound, Southeast Mound, Dunlap Mound, Earth Lodge, Mound X, prehistoric trenches, and corn storage pits. The entirety of the Macon Plateau site is included within the Ocmulgee Old Fields traditional cultural property.

Also present within the site are the Dunlap House, Civil War fortifications, visitor center, and historic flagstaff, which are significant and contributing resources to the site but not significant under the themes identified in this special resource study (New South Associates 2020; NPS 2019; New South Associates 2018; Andrews, Collings, and Lee 2014; Wheeler 2007; Brown 1996; Brewer and Hammerstein 1991; Walker 1971). These resources are within the Ocmulgee Mounds National Historical Park and listed in the National Register of Historic Places. The Macon Plateau is also recognized as having significance to descendant Creek peoples in a variety of ways, and these descendant communities acknowledge a shared identity with the Mississippian period people who built these mounds (Butler 2019; Harjo 2019; Perez 2019; Spain 2019; Lee 2014).

Many of the resources at this site were investigated during the New Deal excavations to some degree, though delays occurred between excavation and reporting. Excavation included test trenches, broad horizontal excavations, and sampling excavations looking for specific features or to answer specific questions.
One such sampling survey tested six areas within the Macon Plateau and Lamar site as well as eight other sites in Bibb County, and one in Baldwin, Butts, Wilcox, and Wilkinson Counties, outside of the Ocmulgee River Corridor Cultural and Archeological District. For the mounds on the Macon Plateau and Lamar site in particular, trenches were dug on the exterior and then moved toward the center. Excavation methods included establishing a grid for mapping the location of features and artifacts, profile mapping, drawing and photography, and experimentation using arbitrary levels instead of following the cultural strata (Halchin 2015b; Brown 1996; Hally 1994; Ritchie 1973; Mason 1963).

Great Temple Mound (Mound A) was among the first areas excavated in 1934, and excavations continued into 1937. A deep shaft was dug from the top to allow archeologists a preview of the mound’s stratigraphy, but the shaft collapsed at a depth of 28 feet. About three-quarters of the Lesser Temple Mound (Mound B) had been destroyed by a railroad right-of-way in 1843 before any excavation was conducted. Funeral Mound (Mound C) had been partially destroyed by a railroad cut in 1872, and the remaining half of the mound was completely excavated in the 1930s.

Cornfield Mound (Mound D) was exposed in 1841 by the railroad and excavated in the 1930s to the original ground surface. The mound was minimally backfilled following excavation, so the mound does not retain its original appearance. McDougal Mound has experienced major destruction, as part of it was used for road fill around 1900, and the mound was excavated in the 1930s and stabilized. Southeast Mound was test-trenched and little was found within it, though much archeological evidence exists of historic activities near it. Dunlap Mound was excavated with several trenches, and then the areas between the trenches were stripped away.

The Earth Lodge was carefully mapped and excavated and then was restored to what is believed to be its original appearance using poured concrete and steel reinforcement between 1933 and 1938. The prehistoric trenches and corn storage pits were investigated during the 1930 excavations, and they are the only surviving structural remains of the Creek occupation of the Ocmulgee Old Fields. The trading post was also excavated, and it and the corn storage pits are included as part of the nationally significant archeological site in the original documentation for the park. Mound X was not investigated as part of the excavations in the 1930s. Instead, it was first identified in 1974 and described as severely eroded (Halchin 2015b; Brown 1996; Ritchie 1973; Mason 1963).

The excavations resulted in a standard ceramic nomenclature for the area, with many ceramic types identified during the New Deal excavations. The excavations and public interest in them were part of the reason the park was designated by Congress in 1934 and established by presidential proclamation in 1936. The artifact collection from this excavation became the exhibits in the visitor center.

Due to its public access and current management by the National Park Service, the Macon Plateau site serves as one of the strongest anchors for the tribe and other Creek descendant tribes in their homelands. Representatives of the 13 tribes traditionally associated with Ocmulgee Mounds National Historical Park consult with the National Park Service as per federal law and NPS policy. Tribal leaders and citizens have given oral history interviews for park studies and provided their perspectives to improve interpretation and education at the site, such as through a 1972 “living history” program at the park in which Muscogee (Creek) tribal citizens conducted craft demonstrations (Opperman 2008; Marsh 1986a). Officials from the Culture and Historic Preservation Office for the Muscogee (Creek) Nation have also helped with the visitor center’s history and interpretive displays (Butler 2021). In the 1970s, tribal citizens were hired to fill temporary interpretive and maintenance positions and also staffed a “trading post” gift shop at the site (Opperman 2008; Marsh 1986a). However, administrative changes at the park in 1976, as well as less community support in Macon, led to these programs and opportunities being discontinued—to intense criticism (March 1986a).

Descendant peoples have also participated in the annual Ocmulgee Indian Celebration, which began in 1992 and will be celebrating its 30th anniversary in 2022 (Ocmulgee Mounds Association 2016).
Lamar Mounds (9BI2): Ocmulgee Mounds National Historical Park

This mound and village site sits on a hummock slightly elevated from the floodplain. The site is the type-site for the Lamar culture, a Late Mississippian period agricultural society. The archeological sites consist of Lamar Mound A, Lamar Mound B (a unique spiral mound), and palisade trenches. The site is a component of the Ocmulgee Old Fields traditional cultural property. These resources are within the Ocmulgee Mounds National Historical Park and are listed in the National Register of Historic Places. The spiral ramp of Mound B is the only such ramp known to exist in the United States. These sites largely represent the late Mississippian period as well as the postcontact Creek period and cultural identity. By the 16th century, the site was the largest settlement in the Georgia Piedmont. Archeologists are fairly certain that the Lamar site was the principal town of the Ichisi, an ancestral people of descendant Creek and Seminole people (Butler 2021; Griffis 2021), and that Hernando de Soto stayed overnight at the site during his northward journey from Florida in 1540. The site declined in dominance after the arrival of de Soto, though it remained occupied (New South Associates 2020; Day and Klingelhofer 2019; NPS 2019; Pauketat and Alt 2015; Wheeler 2007; Hudson 1997; Brewer and Hammerstein 1991; NPS 1988; Ritchie 1973; Walker 1971).

The site was excavated by the Civil Works Administration in 1933–1934 under the direction of James A. Ford and under the Works Progress Administration in 1936 under Arthur R. Kelly as part of the New Deal Archeology program. Excavations continued until August 1941, when the excavation on the palisade trenches ended, which was also the end of large-scale archeology at Ocmulgee.

Many of the same excavation techniques used at the Macon Plateau sites, such as sampling trenches and pits, horizontal excavations, grid mapping, drawing, and photography, were employed at the Lamar site. Excavators also used sump pumps to remove water from the trenches and employed a new technique called seriation on the ceramics. At the Lamar site, a portion of Mound A was excavated in the 1930s through a series of parallel trenches. The palisade trenches were excavated between 1939 and 1941, before a levee was constructed at the site. Mound B has not been excavated (Halchin 2015b; Brown 1996; Hally 1994; Ritchie 1973; Mason 1963). Charles H. Fairbanks developed a hypothesis of ceramic and cultural continuity between the people who created the Lamar ceramics and the later ceramics of the Creek peoples living in the river corridor. Fairbanks’s work has been widely used, expanded upon, and in some cases challenged as well (New South Associates 2020; Roller and Moyer 2020; NPS 2019; Day and Klingelhofer 2019; New South Associates 2018; Halchin 2015b; Pauketat and Alt 2015; Anderson, Smallwood, and Miller 2015; Andrews, Collings, and Lee 2014; Hammack 2008; Wheeler 2007; Williams and Thompson 1999; Brown 1996; Steinen 1995; Waselkov 1994; Claassen 1993; Marsh 1998, 1986a, 1986b; Ritchie 1973; Mason 1963; Tamplin 1937).

The site is listed as a historic period Creek site in the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999). Hammack identifies this site as a historic Creek site (Hammack 2008). The Lamar Mounds have long been a noncontiguous unit of the Ocmulgee Mounds National Monument, but the park’s boundary was adjusted in 2019 under the John D. Dingell, Jr. Conservation, Management, and Recreation Act (PL 116-9) to connect it with the Macon Plateau (9BI1) site and improve access.
The 13 tribes traditionally associated with Ocmulgee Mounds National Historical Park anticipate that the expanded boundary and federal management connection between the two sites will provide better access to the Lamar site and improve the tribes' relationship to significant resources in their homeland.

**Swift Creek (9BI3)**

This mound and village site, located on a terrace along the eastern side of Ocmulgee River, is the type-site of the Swift Creek culture, which extended over most of Georgia during the Middle Woodland period as well as into Tennessee, Alabama, and Florida. The site also represents features of the Archaic and other Woodland (Mossy Oak, Deptford, Napier) periods. The site was discovered during the New Deal projects in 1935 and 1936 by Arthur Kelly and excavated in 1938 by the Civilian Conservation Corps (Hally 1994; Schnell 1973; Tamplin 1938) under the direction of Gordon Willy and his Central Georgia Stratigraphic Survey Project (Halchin 2015a, 2015b). The site is also notable because it was discovered by an all-female African American field crew in 1936 (Andrews, Collings, and Lee 2014; Marsh 1998). Thus, Swift Creek is not only a type-site but is important to African American heritage of the early 20th century.

Originally a site with two mounds and large village area, the construction of Camp Wheeler during World War II (Georgia Historical Society 2014) destroyed one of the mounds, about two-thirds of the other mound, and approximately half of the village area (Walker 1971). In 1995, NPS archeologists discovered the Swift Creek Village site (9BI82), which is likely a surviving portion of the original Swift Creek site.

The site has been cultivated, and its current research potential is not addressed in existing documentation. Steinen (1995), however, notes that the Swift Creek site is one of the most discussed but underreported archeological sites in Georgia.

**Brown’s Mount (9BI5)**

This is a village and mound site of the Archaic, Mississippian, and historic Creek periods. Major excavations took place here in 1935 as part of the New Deal archeology programs, though comprehensive reports were not written until the 1990s. Smaller-scale excavations took place in the 1950s and 1960s. The site is a rare Macon Plateau period (AD 950–1000) site, with houses and more than one council chamber similar to those found on the Macon Plateau, making it an auxiliary site to understanding the Macon Plateau. For the Macon Plateau subperiod of the overall Early Mississippian period, there are only seven known sites, of which Brown’s Mount is the second largest, compared to the Macon Plateau site. The Early Mississippian period at Brown’s Mount appears to be its most important period of occupation (Wheeler 2007; Hally 1994; Williams 1993; Walker 1971; Georgia Archaeological Site Files).

The site is located on one of the only elevated limestone projections in Bibb County, and from its location, the entire central Ocmulgee River basin can be viewed. No other location in central Georgia with such a view exists, and archeologists believe that this would have been apparent to the precontact peoples and occupants. Archeologists have hypothesized that the site may have been used for ceremonial and/or defensive purposes. Historical accounts may support a defensive purpose, due to reports of a defensive wall at the site, which was gone before the New Deal excavations (Williams 1993).
In 2019, a privately owned portion of Brown’s Mount was placed on the market and threatened with development. The Muscogee (Creek) Nation purchased the land (126 acres), and their purchase was the first reacquisition of property by the tribes in their historic homeland since their removal in the 1830s (Watson 2021, 2020). The purchase represents the tribe’s commitment to the preservation of and relationship with their homelands.

One Mile Track (9BI7)

This habitation site contains elements that represent the Archaic, Woodland (Swift Creek), Mississippian (Macon Plateau and Lamar), and the historic Ocmulgee Fields periods. The site may be related to the 1817 gathering of Creek people at their last great assembly in the East, and is therefore important to Creek history and identity. This gathering of Creek people is also reported from the One Mile Track site (9BI7). The site was reported by Kelly in his 1938 report on the explorations at Macon (Hammack 2018; Shull 2000; Hally 1994; Smith 1992; Walker 1971; Georgia Archaeological Site Files 1964; Kelly 1938). The site is listed as a historic period Creek site in the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999). The keeper of the National Register of Historic Places noted in correspondence in 2000 that this site may have retained its ability to yield additional information (Shull 2000).

Deer Park (9BI8)

This site contains elements of Archaic (Stallings Island), Woodland (Swift Creek), Mississippian (Lamar), and the historic Ocmulgee Fields periods.

The site may be related to the 1817 gathering of Creek people at their last great assembly in the East and is therefore important to Creek history and identity. This gathering of Creek people is also reported from the One Mile Track site (9BI7). The site was reported by Kelly in his 1938 report on the explorations at Macon (Hammack 2018; Shull 2000; Hally 1994; Smith 1992; Walker 1971; Georgia Archaeological Site Files 1964; Kelly 1938). The site is listed as a historic period Creek site in the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999). The keeper of the National Register of Historic Places noted in correspondence in 2000 that this site may have retained its ability to yield additional information (Shull 2000).
Day and Klingelhofer noted that the site is important to Creek peoples in their 2019 report. The keeper of the National Register of Historic Places noted in correspondence from 2000 that this site may have retained its ability to yield additional information (Shull 2000).

_Horseshoe Bend (9BI10)_

This village site produced a large quantity of artifacts that date to the Woodland (Napier), and Mississippian (Etowah, Macon Plateau, Lamar) periods. The majority of the ceramics were Lamar, dating to the last Mississippian period, and bear a motif associated elsewhere with the Southern Cult. The site was tested in 1935 under the direction of Arthur R. Kelly as part of the New Deal archeology program (Bland et al. 2001; Hally 1994; Walker 1971; Schell 1973; Georgia Archaeological Site Files 1964). The specifics of this site’s current research potential are unaddressed in existing documentation (NPS 2014c; Schell 1973; Georgia Archaeological Site Files 1964).

_Mossy Oak (9BI11)_

This village site and artifact scatter is located on the flat river bottom and alluvial flood plain. The site is the type-site for the Mossy Oak culture of the Middle to Late Woodland period. The site also has features of the Lamar phase of the Mississippian period. The site was excavated in 1936 by the WPA under Arthur R. Kelly and in 1937 by the Civilian Conservation Corps under Gordon Willey with his Central Georgia Stratigraphic Survey Project as part of the New Deal archeology program. (Halchin 2015a; Hally 1994; Walker 1971; Tamplin 1937; Nichols 1936; Schnell 1973).

A full report on the Mossy Oak site has not yet been published, and an attempt to relocate the site in the early 2000s determined that the site’s actual location was elsewhere (Bland 2002; Bland, Johnson, and Smith 2001).

Schnell’s entry on the site form did not determine the site’s eligibility in the national register, nor did the entry identify a level of significance (Schnell 1973).

_Stubbs Mound (9BI12)_

This mound and village site produced new ideas about the origin of the Lamar culture and is important to the central Georgia dating and cultural sequence and features elements of the Archaic, Woodland (Swift Creek), and Mississippian (Lamar) periods (Williams 1992; Georgia Archeological Site Files). Bland (2001) has suggested that the site is an example of a paired town, with the Lamar site (9BI2) serving as its counterpart. The mound was virtually completely excavated during the 1930s as part of the New Deal program, though the fields surrounding it were not and provide potential for future research. Burned houses and burials were reported from this site (Bland et al. 2001; Hally 1994; Williams 1992; Gresham 1986). The site was a part of Gordon Willey’s Central Georgia Stratigraphic Survey Project and included in the New Deal archeology program (Halchin 2015a).

Hammack identifies this site as a historic Creek site (Hammack 2008). Day and Klingelhofer (2019) note that the site is important to the Creek people and their descendants in part due to the remains of ancestors exhumed during excavation. These individuals’ remains are being repatriated to the tribes.

_Cowarts Landing (9BI14)_

This village site, located on an old river terrace above the Echeconnee Creek with a high sloping bluff to the west, dates to the Archaic (St. Simons), Woodland (Mossy Oak, Swift Creek, Napier) and Mississippian (Lamar) periods and was excavated in 1936 and 1937.
Arthur Kelly and Gordon Willey, under his Central Georgia Stratigraphic Survey Project (Halchin 2015a; Bland et al. 2001; Hally 1994; Schell 1973; Georgia Archaeological Site File n.d.), reported on this site. Willey reported that at this site, Lamar ceramics were found above Swift Creek ceramics in good stratigraphic context—the first time these ceramics had been found together with good context. The Cowarts phase ceramic assemblage, also identified at this site, was determined to be a subphase of the classic Lamar ceramic typology (Bland, Johnson, and Smith 2001; Steinen 1995; Williams and Evans 1993; Lawson 1988).

Day and Klingelhofer note in their 2019 report that the site is important to the Creek people and their descendants in part due to the remains of ancestors exhumed during excavation. These individuals’ remains are being repatriated to the tribes.

**Hawkins Point (9BI15)**

This village site, situated on a high river bluff at the junction of the Ocmulgee River and Echeconnee Creek, dates to the Mississippian (Lamar) period. It was excavated in 1937 by the Civilian Conservation Corps under the direction of Gordon Willey and his Central Georgia Stratigraphic Survey Project during the New Deal archeology program (Halchin 2015a; Hally 1994; Tamplin 1937). The site was recognized as a “pure Lamar Complex” at that time (Tamplin 1937). Though the site is listed as having been eroded and under cultivation (Georgia Archaeological Site File n.d.), it still warrants inclusion as a contributing site. The CCC documentation shows that the site was under cotton cultivation, at an average depth of 12 inches below surface, and 10 ft × 10 ft pits were dug, with large areas left unexcavated between them (Tamplin 1937).

**Scott Mound (9BI16)**

This village and mound site features components of Archaic, Woodland (Mossy Oak, Swift Creek), and Mississippian (Macon Plateau, Lamar) and historic Ocmulgee Fields periods. The site has a similar chronology and composition to Stubbs Mound, which is a contributing resource. The site was excavated in 1937 under the direction of Gordon Willey with his Central Georgia Stratigraphic Survey Project as part of the New Deal archeology program (Halchin 2015a; Bland, Johnson, and Smith 2001; Hally 1994; Schnell 1973; Walker 1971).

The site is listed as a historic period Creek site in the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999). Hammack identifies this site as a historic Creek site (Hammack 2008), and Day and Klingelhofer noted the site was important to Creek peoples in their 2019 report.

**Cherry Bluff/Ida Holt Village (9BI20)**

This village and cemetery site dates to the Woodland (Swift Creek/Etowah and Napier) and Mississippian (Lamar) periods. The site was surveyed in 1934 as part of the New Deal archeology program by C.C. Harold and recorded as a high-grade (type A) site, and it was noted as eroding out of the Ocmulgee riverbank. The original site inventory card of the 1930s states that it is not certain if the Cherry Bluff site is the same as the Ida Holt Village site (Bland et al. 2001; Georgia Archaeological Site File 1964). The site’s location is therefore unconfirmed (Bland, Johnson, and Smith 2001; Walker 1971).

The original site inventory card of the 1930s additionally states that the site was located 4 feet below the surface, and the occupation levels at the riverbank had “very rich outcroppings of pottery and bones” (Georgia Archaeological Site File n.d.).
**Fort Hawkins (9BI21): City of Macon**

The site was named after Indian Affairs Agent Benjamin Hawkins and encompasses a 19th-century fort blockhouse, stockade, village, cemetery, and three precontact period mounds. The site was excavated in 1936 under the direction of Gordon Willey, and in the early 2000s by the LAMAR Institute Inc. The site today also features a replica of the fort's blockhouse, completed in 1938 (Elliott, Luke, and O'Steen 2013; South 1970; Hally 1994; Curtis 1993b). The site is important to Creek descendants for its location within the Ocmulgee Old Fields and as a center for historic interactions with the US government and trade relationships (Elliott et al. 2007).

In the Treaty of Washington (1805) article 1, the Creeks ceded all their lands east of the Ocmulgee River except for a 15-square-mile tract (the Ocmulgee Old Fields), including the Macon Plateau and the Lamar sites (Elliott et al. 2007; Wheeler 2007; Walker 1994). In this same treaty, the Creeks granted the United States the right to establish and maintain a military and a trading house (Curtis 1993b; Butler 1879). The Creeks allowed the building of Fort Hawkins on their land, to which they retained the title, in 1806, and the fort served as a center for government-to-government relations with the Creek until 1816 when the federal facility shifted to Fort Mitchell in Alabama. Fort Hawkins was also the first permanent European American settlement along the Ocmulgee River and became the center of settlement for the later city of Macon (Elliott, Luke, and O'Steen 2013; Hammack 2011; Joseph, Hamby and Long 2004; Walter 1994; South 1970).

The fort allowed the US government to improve infrastructure and transportation as the Americans continued to expand westward (Andrews, Collings, and Lee 2014; Elliott, Luke, and O'Steen 2013). The fort was in a prominent and tactical position to disperse military troops during the War of 1812 and through the Creek War of 1813–1814, after which additional forts were constructed along the Ocmulgee River. The fort itself did not see military action but housed troops (between 200 and 3,000 people), civilians, and supplies and hosted important figures such as Andrew Jackson in 1818 (Day and Klingelhofer 2019; Elliott, Luke, and O'Steen 2013; Hammack 2011; Curtis 1993b; Butler 1879). By 1818, white settlers were leasing the land surrounding Fort Hawkins for settlement (Curtis 1993a, 1993b) and from 1819 to 1824, soldiers and equipment for war were slowly moved, and the fort was decommissioned (Elliott, Luke, and O'Steen 2013).

By 1828, Fort Hawkins, the surrounding land, the mounds nearby and on the Macon Plateau, and the former Creek reservation of the Ocmulgee Old Fields were sold (Hunt 2020; Pauketat and Alt 2015; Wheeler 2007; Walker 1994; Butler 1879). The fort served as a stop of Andrew Jackson during the Seminole Wars of the 1830s and the site from which the Creeks were forcibly removed from Georgia to the west from 1833 to 1838. Few records are associated with the number of soldiers assigned to Fort Hawkins after 1819, but records at the National Archives and Records Administration indicate Creek and Yuchi soldiers mustered into the regiments of Colonel Benjamin Hawkins and Major William McIntosh at Fort Hawkins during the War of 1812 (Elliott, Luke, and O'Steen 2013).

Fort Hawkins is individually listed in the National Register of Historic Places (1977) and is a contributing resource to the Fort Hill Historic District. Fort Hawkins School, a school historically for white children, was constructed on the site in 1920. In 1929, the Daughters of the American Revolution began work to construct a replica of the fort's blockhouse to commemorate the fort's existence.
The bank where their reconstruction funds were deposited, however, failed, and work stopped on the replica (made from nonoriginal materials such as precast concrete logs and terra cotta shingles). In 1938, with help from the Works Progress Administration, the replica blockhouse was completed (Curtis 1993b). The excavation reports of Elliott and Elliott (2016) with the LAMAR Institute Inc. mention additional geophysical anomalies that may represent cultural features that have not yet been excavated.

**Bullards Mounds, a.k.a. Bullard Landing (9TW1)**

This site, located in the river floodplain, is a village, artifact and lithic scatter, and mound site that dates to the late Woodland and late Archaic periods, with a major occupation from the Mississippian period. The Mississippian occupation is presumably based on the prevalence of a Cowarts phase ceramic assemblage contemporary with the Lamar phase and possibly the De Soto expedition. The site consists of approximately 24 low mounds, which were possibly used for domestic structures, and a large mound that may represent a public structure. Eleven of the mounds are arranged in a circular pattern (Williams and Evans 1993; Smith 1992; Georgia Archeological Site Files).

The site was first reported by Professor J. D. Blair of Mercer University in 1933, who also sank pits into two of the mounds, recovering projectile points, ceramics, stone, nonhuman bone, and corn remnants. The site was included in the 1934 New Deal archeology survey and received a high-grade (A) designation by Dr. C.C. Harrold (Walker 1994). Correspondence between Arthur Kelly and John R. Swanton at the Smithsonian in 1934 indicated hope that the site would be included in the new Ocmulgee National Monument (Williams and Evans 1993).

The site was also recorded in 1939 by Robert Wauchope, who was primarily involved in the New Deal archeology program in northern Georgia, but who also worked elsewhere in the state until 1940 (Walker 1994). The 1939 documentation has no information for condition of the site at that time, and listed the two pits sunk by Professor Blair under previous excavations (Wauchope 1939; Georgia Archeological Site Files).

Williams and Evans reported on the site in 1993 and described it as a uniquely preserved village with 24 small mounds, which may actually represent earth lodges. The preservation is unique in that the mounds and the village area were covered in alluvium and the area had never been farmed or plowed. The lack of agricultural perturbation indicates that archeological features and artifacts are undisturbed. The area is covered in planted pine. Logging took place at the site in the 1960s, and part of a mound was bulldozed during the creation of a logging road. In 1971, looting was discovered at the site and documented, though a full report was not completed. In 1987, the site was mapped by the Macon Chapter of the Society for Georgia Archaeology, and in 1988 students from Mercer University attempted to remap the mounds on the 1987 map. The village was excavated in 1988 through 1990 as part of Mercer University’s archeology program, and Williams and Evans’ report covered the work conducted in the 1990 season. The report concludes that there are still many questions about the site and the people who lived there, such as (1) location of agricultural fields and diet, (2) social organization at the site (individual family or multiple families with habitation locations based on kinship), (3) the possibility of the site as a representation of a chiefly compound, (4) the prevalence of earth lodges at other Mississippian sites and implications for warfare/peace due to earth lodges and lack of human-made
defenses, and (4) reasons for the site’s short occupation and abandonment. Williams and Evans have further suggested that the site is the first within the Province of Ichisi that De Soto and his expedition visited based on De Soto’s records, the geology and watershed, and the period of occupation (Williams and Evans 1993).

**Individual Archeological Sites of the Ocmulgee River Corridor Cultural and Archeological District Contributing to National Significance under Criterion 6 Only**

Although the New Deal excavations within the Ocmulgee River corridor were advanced in many ways, the overall scope of the federal relief projects, the lack of support between 1933 and 1936, and the departures of trained archeologists resulted in poor reporting. Kelly’s excavations remain underreported, and many artifacts recovered in the 1930s remain unanalyzed. Interim reports were written and conference papers were given, but it wasn’t until the 1960s that the National Park Service arranged reports on the federal relief excavations (Bigman 2012; Walker 1994). In addition, what has been reported has faced criticism (Paige 1985). While much of the primary material is remarkably intact, the material has been geographically spread and reorganized, leading to the loss of information. Though the archeological forms were standardized, omissions or mistakes on those forms are compounded due to the distance in time from the excavations and the movement or loss of supplementing forms and field notes.

Additional limits and sensitivities exist when discussing archeological sites in general and Native tribes’ cultural history. American archeology has been dominated by European American thought and practitioners, which has inherently limited the field to those theories and practices.

A greater diversity in American archeology, especially with the incorporation of Native worldviews, would expand the range of questions, interests, and theories to more fully capture the human experience.

Given the National Park Service’s call to action for the next century of stewardship, the broad historical approach taken in the historic context narrative, and the consultation with descendant Creek people to develop the context and topics for this national significance evaluation, this section is included to consider sites that support a revisit and reimagining of the impacts and legacy of the New Deal archeological work. These sites do not meet NHL criteria 1 because they are not directly associated with the New Deal program of work; however, they offer opportunities for future collaboration with descendant tribes to arrive at new research questions, new applied perspectives to sites and artifact collections, new information, and new conclusions. Combining tribal perspectives with modern archeological theory and methods has the potential to better answer questions posed by the New Deal work and further the research effort that investigators started nearly 100 years ago. These sites are included as contributing resources to the district because they retain integrity of deposition and significant research potential and because they have been identified through consultation with descendant Creek tribes as important to maintaining tribal identity, history, and cultural continuity. Summary information about these contributing resources can be found in table 1.
Gledhill 2 (9BI18)

This artifact scatter represents the Paleoindian, Archaic, and Mississippian periods in the area. The Paleoindian period is identified through the discovery of a Clovis projectile point, and Gledhill 2 is the only other site besides the Macon Plateau that has produced evidence of this period (Walker 1971). The Archaic period projectile points have been identified as Kirk Serrated, Big Sandy, Palmer, Stanley, Morrow Mountain, and Savannah River. The Mississippian period projectile points have been identified as a Mississippian Triangular point.

The Georgia Archeological Site Files note that artifact scatter is eroded. The site survey card, however, states that while part of the site was damaged by road construction, the rest of the site remains intact. The site survey card does not make a determination of whether the site is eligible for the national register (Quillian 1980). Bland (2001) reports that Gresham and Rudolph (1986) state that the Gledhill sites have no further research potential; however, there has been no confirmation of this assessment. Hammack identifies this site as a historic Creek site (Hammack 2008).

Screeching Hawk (9BI64)

The site is located along Tobesofequkee Creek and consists of artifact and lithic scatters from the Archaic and Woodland periods as well as the 18th and 19th centuries (Bland et al. 2001; Paglione 1985). In 2000, Carol Shull, keeper of the National Register of Historic Places, corresponded with Larry Dreihaup of the Federal Highway Administration and noted that the area in which the site is located is important to Creek history and identity.

Paglione’s site form with the Georgia Archaeological Site Files states that the site is potentially eligible for national register and recommended additional testing (Paglione 1985).

Unnamed Site (9BI73)

This site, located in the Ocmulgee River floodplain, is an undisturbed artifact and lithic scatter representing the Woodland (Dunlap) period. The site is listed as a historic period Creek site in the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999). Gardner notes on the site form with the Georgia Archaeological Site Files that the site is undisturbed and eligible for the National Register of Historic Places with local significance (Gardner 1994).

Site 10 (No Name) (9BI98)

The Georgia Archaeological Site file records lists the site as a lithic scatter of an unknown period located within the floodplain. The site was investigated as part of the 1998 Eisenhower Parkway archeological evaluation, but the site boundary was not defined during the investigation. The site has been cultivated and eroded, and its national significance is unaddressed in existing documentation (Sanders 1998).

Adele Mound (9BI128)

This site was particularly recognized by tribes and other stakeholders during initial consultation as a site of importance to tribal identity, history, and cultural continuity, providing continuing evidence of how their ancestors maintained their way of life. The site is in the Ocmulgee River floodplain and consists of a village and mound site dating to the Mississippian (Macon Plateau, Lamar, Cowart’s Phase) period. Approximately 13–17 low mounds possibly used for domestic structures are present, and with exception of Mound A, which has been impacted by looting and erosion, the site has been preserved by alluvium.
Unlike other contemporary Lamar period sites, there is no plaza pattern clearly discernable at the site, nor is there evidence for a palisade wall and/or ditch, though the alluvium may be obscuring these defensive features (Keith 2004; Bland et al. 2001; Bland 2000). As Bland (2001) notes, the owners were not approached by the Works Progress Administration or the Civilian Conservation Corps, and there are no signs of previous, professional archeological investigations.

The site has been vandalized by looting and damaged by erosion; however, the Georgia Archeological Site Files state that this vandalism and erosion is concentrated at Mound A, and “all other mounds and a majority of the site are preserved under a post settlement alluvium cap” (Bland 2000). The site is documented among the Georgia Archaeological Site Files forms generated from the research accompanying An Intensive Cultural Resource Assessment Survey and Site Evaluations, Cherokee Brick and Tile Company Tract, Bibb County Georgia (Bland 2000).

**W.B. Smith Site (9HT236)**

The Georgia Archaeological Site Files state that this site is a precontact Indian village that dates to the Archaic and Mississippian periods. The site is described as being located in an “old field.” Artifacts such as projectile points, blades, axes, and ceramic pottery sherds were recovered from the site. The site is currently under cultivation, but its integrity was not addressed in existing documentation (Shelley 2012).

**Keelings (Keelings Fish Camp, Keelings Landing) (9HT245)**

The Georgia Archaeological Site Files state that this village site is located on a ridge, and that ceramic sherds, projectile points, and lithic blades were recovered during archeological investigation. The cultural periods represented at this site range from the Woodland period to the Mississippian period. The site is described as cultivated and undisturbed, though its eligibility for the National Register of Historic Places is unaddressed (Walker and Shelly 2012).

**Shelly Mound (9PU3)**

The Georgia Archaeological Site Files state that the site is a mound that contained burials and ceramic pots and dates to the Late Woodland period, specifically Weeden Island (Williams 1990). Steinen states that the mound was excavated in the 1960s. Examples of Kolomoki Complicated Stamped, Swift Creek Complicated Stamped, and Weeden Island Plain ceramics from the site are curated at West Georgia College. The Weeden Island ceramics represent a population intrusion (Steinen 1995).

The narrative within the state files indicates that the mound was previously professionally excavated as well as looted (Georgia Archaeological Site Files n.d.). The site’s integrity and eligibility for the National Register of Historic Places is unaddressed in existing documentation (Williams 1990).
Table 1. Archeological Sites Contributing to the Significance of the Ocmulgee River Corridor Cultural and Archeological District

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Contributing to NHL Criterion 1</th>
<th>New Deal Program</th>
<th>Contributing to NHL Criterion 6</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macon Plateau</td>
<td>Yes</td>
<td>» CWA 1933–1934&lt;br&gt;» FERA 1934–1935&lt;br&gt;» WPA 1935–1937&lt;br&gt;» CCC 1937–1941; Willey's stratigraphic survey</td>
<td>Yes</td>
<td>The Macon Plateau, which comprises multiple sites, was where the majority of the New Deal excavations took place, new field techniques were used, and where the majority of the artifacts were recovered. These artifacts still need to be analyzed.</td>
</tr>
<tr>
<td>Lamar Mounds</td>
<td>Yes</td>
<td>» CWA 1933–1934&lt;br&gt;» FERA 1934–1935&lt;br&gt;» WPA 1935–1937&lt;br&gt;» CCC 1937–1941; Willey's stratigraphic survey</td>
<td>Yes</td>
<td>The New Deal excavations at Lamar used the same field techniques as those of the Macon Plateau. From the artifacts recovered here, Charles Fairbanks developed a hypothesis of cultural continuity from the people of the late Mississippian period and contact-period Creek peoples.</td>
</tr>
<tr>
<td>Swift Creek</td>
<td>Yes</td>
<td>» WPA 1935(?)–1936&lt;br&gt;» CCC 1938; Willey's stratigraphic survey</td>
<td>Yes</td>
<td>Although this is the type-site for the Swift Creek culture and was discovered during the New Deal excavations, the Swift Creek site is underreported. The underreporting indicates future research potential.</td>
</tr>
<tr>
<td>Brown’s Mount</td>
<td>Yes</td>
<td>» WPA 1935</td>
<td>Yes</td>
<td>This is a site that may have been contemporaneous with the Macon Plateau sites. A council chamber, similar to the Macon Plateau Earth Lodge was discovered here. Comprehensive reports began to be published on the site in the 1990s, and renewed interest in the site may lead to new conclusion about the site and the people who lived there.</td>
</tr>
<tr>
<td>Site Name</td>
<td>Contributing to NHL Criterion 1</td>
<td>New Deal Program</td>
<td>Contributing to NHL Criterion 6</td>
<td>Comments</td>
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</tr>
<tr>
<td>One Mile Track</td>
<td>Yes</td>
<td>» FERA 1934–1935</td>
<td>Yes</td>
<td>Possibly associated with the last great assembly of Creek people in the East (1817), this site was excavated during the New Deal period. Kelly mentioned the site in his 1938 publication, and later analysis of his unpublished note (2010) indicates future research potential.</td>
</tr>
<tr>
<td>Deer Park</td>
<td>Yes</td>
<td>» WPA 1935</td>
<td>Yes</td>
<td>Possibly associated with the last great assembly of Creek people in the East (1817), this site was excavated during the New Deal period. Kelly mentioned the site in his 1938 publication, but no other publication or analysis of Kelly's unpublished notes on this site has occurred.</td>
</tr>
<tr>
<td>Napier</td>
<td>Yes</td>
<td>» FERA 1934(?)–May 1935 (end)</td>
<td>Yes</td>
<td>This site is the type-site for the Napier culture. In a reanalysis of Kelly's unpublished field notes, descriptions and comparisons of Napier ceramics helped provide chronological continuity to what was being discovered on the Macon Plateau (2010).</td>
</tr>
<tr>
<td>Horseshoe Bend</td>
<td>Yes</td>
<td>» FERA May 1935</td>
<td>Unknown</td>
<td>The site lacks a comprehensive report. Later researchers (Walker 1971) have noted the high concentration of pottery recovered from this site and possible connections to pottery elsewhere associated with the Southern Cult.</td>
</tr>
<tr>
<td>Site Name</td>
<td>Contributing to NHL Criterion 1</td>
<td>New Deal Program</td>
<td>Contributing to NHL Criterion 6</td>
<td>Comments</td>
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</tr>
</tbody>
</table>
| Mossy Oak    | Yes                             | » WPA 1936  
» CCC 1937; Willey’s stratigraphic survey | Unknown                         | This site is the type-site for the Mossy Oak culture. A full report on the site has not been published. Attempts to relocate the site suggest that refinements to the location are needed. |
| Stubbs Mound | Yes                             | » WPA August–September 1936  
» CCC 1938; Willey’s stratigraphic survey | Yes                             | This site is important to the development of dating and cultural sequences in central Georgia and may be a town that was “paired” with the Lamar site (9BI12). Future research potential may be found in the unexcavated fields surrounding the site. |
<p>| Cowarts Landing | Yes                         | » CCC 1937; Willey’s stratigraphic survey                                | Yes                             | This site provided the first example of Lamar ceramics found above Swift Creek ceramics in a good stratigraphic context, helping to determine dating of these cultural sequences. |
| Hawkins Point | Yes                             | » CCC 1937; Willey’s stratigraphic survey                                  | Unknown                         | Recognized as a “pure Lamar complex” at the time, the site was tested with large pits but not fully excavated, allowing for future research potential. |
| Scott Mound  | Yes                             | » CCC 1937; Willey’s stratigraphic survey                                  | Yes                             | This site featured multiphase cultural components, including historic Ocmulgee Fields. The site is similar to Stubbs Mound (9BI12) in its composition and chronological sequence. |</p>
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Gledhill 2</td>
<td>No</td>
<td>» NA</td>
<td>Yes</td>
<td>This site has produced evidence for occupation during the Paleoindian period and is the only other site besides the Macon Plateau to have produced this evidence in the region. Despite some impacts from the installation of Interstate 16, most of the site remains intact. The future research potential of the site has not been fully assessed.</td>
</tr>
<tr>
<td>Cherry Bluff/Ida Holt Village</td>
<td>Yes</td>
<td>» A 1934 survey is mentioned in C.C. Harrold's notes</td>
<td>Unknown</td>
<td>Identified as part of a 1934 survey, the site was recorded as a high-grade (A) site, though eroding out of the riverbank. Today, the location of the site is uncertain and may retain integrity for future research.</td>
</tr>
<tr>
<td>Fort Hawkins</td>
<td>Yes</td>
<td>» WPA September–October 1936</td>
<td>Yes</td>
<td>Excavated in 1936, the fort site was important during the War of 1812, the Creek War of 1813–1814, and as the location from which ancestral Creeks were forcibly removed to the West. Elements of the fort were also reconstructed by the Works Progress Administration in 1938. Reports from the mid-2010s indicate that the site has additional features that have not yet been excavated, indicating future research potential.</td>
</tr>
<tr>
<td>Screeching Hawk</td>
<td>No</td>
<td>» NA</td>
<td>Yes</td>
<td>This site is located in an area important to Creek history and identity. Additional testing was recommended within the existing documentation.</td>
</tr>
<tr>
<td>Unnamed Site</td>
<td>No</td>
<td>» NA</td>
<td>Yes</td>
<td>This artifact scatter is undisturbed and may provide for future research potential</td>
</tr>
<tr>
<td>Site Name</td>
<td>Contributing to NHL Criterion 1</td>
<td>New Deal Program</td>
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</tr>
<tr>
<td>Site 10 (No Name)</td>
<td>No</td>
<td>× NA</td>
<td>Yes</td>
<td>Investigated as part of the Eisenhower Parkway archaeological evaluation, the site boundary was not determined. Since the size of the site is not known, there is potential for future research.</td>
</tr>
<tr>
<td>Adele Mound</td>
<td>No</td>
<td>× NA</td>
<td>Yes</td>
<td>The majority of the site has been preserved under alluvium and remains unexplored by professional archeologists. This state of preservation may provide for future research potential.</td>
</tr>
<tr>
<td>W.B. Smith Site</td>
<td>No</td>
<td>× NA</td>
<td>Yes</td>
<td>Described as being located with an “old field,” the site is underreported and under cultivation, possibly having future research potential.</td>
</tr>
<tr>
<td>Keelings (Keelings Fish Camp, Keelings Landing)</td>
<td>No</td>
<td>× NA</td>
<td>Yes</td>
<td>The site is described in available documentation as undisturbed, and the site is underreported. Future research potential may exist.</td>
</tr>
<tr>
<td>Shelly Mound</td>
<td>No</td>
<td>× NA</td>
<td>Yes</td>
<td>This site features multiple ceramic phases and was partially excavated in the 1960s and 1970s. The site is underreported and has future research potential.</td>
</tr>
<tr>
<td>Bullards Mounds, a.k.a. Bullard Landing</td>
<td>Yes</td>
<td>× 1934 survey</td>
<td>Unknown</td>
<td>Identified as part of a 1934 survey, the site was recorded as a high-grade (A) site. Correspondence between Kelly and Swanton at that time indicated their hope that the site would be included within Ocmulgee National Monument. The site has been preserved under alluvium and has not been disturbed, indicating high future research potential.</td>
</tr>
</tbody>
</table>

Notes: CWA – Civil Works Administration; FERA – Federal Emergency Relief Administration; WPA – Works Progress Administration; CCC – Civilian Conservation Corps
Ethnographic and Cultural Landscape of the Ocmulgee River Corridor Cultural and Archeological District

Known archeological sites are only one part of the wider cultural landscape that makes up the Ocmulgee River Corridor Cultural and Archeological District. To understand that landscape, critique and modernize past understandings of the district, and acknowledge the significance of individual sites for the wider American public and descendent Creek peoples, an understanding of the ethnographic significance of the district’s cultural and natural resources is required. This section describes ethnographic resources that contribute to the significance and continuing research potential of the district. Table 2 also provides a summary of this list of resources.

Traditional Cultural Property/Cultural Landscape

Ocmulgee Old Fields Traditional Cultural Property. The National Register Bulletin 38 defines a traditional cultural property as a site “that is eligible for inclusion ... because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1990). The Ocmulgee Old Fields traditional cultural property possesses significance to the Muscogee (Creek) Nation, as it encompasses Creek descendants’ place of origin and first permanent settlement—the “cradle of Creek Confederacy.” The Ocmulgee Old Fields traditional cultural property gets its name from the Ocmulgee Old Fields, a portion of a roughly 15-square-mile tract called the Mason East Reserve that the Creek Nation owned until 1825 (Haveman 2017, 2009; Green 1982; Bowen 1997).

Early European historical documentation records that indigenous people lived in this area, farmed the land, and traded with other Native peoples and Europeans. However, occupation of the Ocmulgee Old Fields extends much further into the past. It was in this area that ancestors of Creek peoples today first settled and confederated. Each tribal town of this Confederation maintained political autonomy and distinct land holdings, and the organization of the confederacy was dynamic enough to expand, including taking in people of other tribes, languages, and ethnicities (New South Associates 2020; Butler 2019; Andrews, Collings, and Lee 2014; Haveman 2009; Walker 2004). Despite the differences among the people of the Confederacy, Europeans referred to all of these people as a group—the Creek Indians (Office of Federal Acknowledgment 2016; Lee 2014; Sturtevant and Cattelino 2004; Walker 2004; Countryman 2000; Mason 1963, 2005 reprint). After the Yamasee War, Creek people moved out of the Ocmulgee River corridor area, though the lands were retained by them, as the land was important to their way of life and culture (New South Associates 2020; Butler 2019; Andrews, Collings, and Lee 2014; Hammack 2011, 2009; Wheeler; Bland et al. 2001; Walker 1994; Smith 1992).

Little by little, the US government took Creek land in treaties as the nation encroached and expanded westward. By the time of the Treaty of 1805, the Creeks had ceded all of their lands east of the Ocmulgee River except for a 15-square-mile tract (the Macon East Reserve), which included the Ocmulgee Old Fields, the Macon Plateau, and the Lamar site, as this land was central to their identity (Day and Klingelhofer 2019; Hammack 2011; Joseph, Hamby, and Long 2004; Ramsey et al. 1995; Curtis 1993b; Butler 1879).
By 1828, the Ocmulgee Old Fields, along with Fort Hawkins and the surrounding land, were sold, and the Indian Removal Act (1830), signed by President Andrew Jackson, resulted in total and complete loss of Native American land in the east. The US Army enforced the removal of the Creeks, and by 1838, the removal was complete (Day and Klingelhofer 2019; Drexler 2019; Haveman 2009; Hammack 2008; Countryman 2000; Smith 1992).

Since the 1990s, the Muscogee (Creek) Nation has been deeply involved in expanding the protection of sites associated with the Ocmulgee Mounds National Historical Park, the Ocmulgee Old Fields, and the broader cultural landscape along the river. First submitted to the National Register of Historic Places in 1997 as part of a federal undertaking, the determination of eligibility for the Ocmulgee Old Fields traditional cultural property sought recognition under criterion A, as a district of longstanding importance to the traditional Muscogee (Creek) culture, and under criterion D, as an area that has provided and can be expected to continue to provide important information on more than 10,000 years of history. The proposed boundaries for the property were based on a combination of Muscogee (Creek) oral tradition (expressed in Tribal Resolution 95-10 and other documents), early historic accounts by William Bartram and Benjamin Hawkins, the Macon Reserve East/Treaty of 1805, and archeological data. The determination of eligibility, however, did not specify the traditional cultural property’s level of significance, instead discussing the significance of the area to the descendant Creek tribes. The determination of eligibility additionally mentions that Creek occupation was limited and late within the Ocmulgee River Corridor Cultural and Archeological District (Bowen 1997).

This conclusion, however, represents a European American point of view and does not consider Creek concepts of ancestors and homeland, which stretches further back in time than the period loosely expressed in the determination of eligibility (contact period 1600; 1690–1715 CE) (Bowen 1997). Brockington and Associates’ 1999 update to the determination of eligibility corrected some of these biased conclusions by including more evidence for descendant Creek peoples’ history and worldview (Brockington and Associates 1999).

The keeper of the National Register of Historic Places designated the Ocmulgee Old Fields traditional cultural property as eligible for listing in the National Register of Historic Places in 1997. In 1999, additional documentation was submitted to the keeper to establish a boundary for the determination of eligibility. The area is generally bounded by Central City Park, Ocmulgee Mounds National Historical Park, the Gledhill sites (north) and Stubbs Mound and Brown’s Mount (south). The Muscogee (Creek) Nation has also recognized the Ocmulgee Old Field’s importance and boundaries in Tribal Resolutions 95-10 and 97-09 (Shull 2000; Dreihaup 1997). While found eligible for listing, the Ocmulgee Old Fields traditional cultural property was not ultimately listed in the national register, as additional information was needed about other cultural resources within the boundary that overlapped, coexisted with, or could have caused the boundary to potentially expand. In 2000, the keeper determined that the Ocmulgee Old Fields traditional cultural property did not meet the national register criteria for evaluation as originally determined or the decision must be reopened. As of 2021, a final determination of eligibility has not been made, nor has a level of significance been determined (Shull 2000; Brockington and Associates 1999; Dreihaup 1999; Harper 1999; Andrews 1997; Bowen 1997).
Comparatively, only one traditional cultural property successfully met the criteria for national significance—Medicine Wheel/Medicine Mountain in Wyoming, which was designated a national historic landmark in 1970 (Simmons et al. 2010).

Cultural resources associated with descendant Creek peoples within the traditional cultural property include the cultural landscape, Ocmulgee River, extraction locations (clay reserves, Long Ponds), plant cultivars (Ocmulgee skullcap, river cane, greenbrier root), animals, and submerged resources which are important to descendant Creek peoples’ cultural identity and way of life (Griffis email communication May 1, 2020; Turner, tribal consultation meeting April 28, 2020; Butler, tribal consultation meeting December 18, 2020).

**Vegetation**

**Greenbrier (Smilax).** Lonnie Davis, a former park ranger at Ocmulgee Mounds National Historical Park, has provided information about important plants to the Muscogee (Creek) Nation that he obtained in conversations with the former Mekko of the Muscogee (Creek) Nation, David Proctor. Proctor related that as a consequence of removal, the Muscogee (Creek) Nation had to replace a culturally important plant called greenbrier root, which is native to the Southeast, with a plant they could find in Oklahoma called red root (Griffis email communication May 1, 2020). The Jordan et al. (2014) survey of vegetation within Ocmulgee Mounds National Historical Park noted the presence of greenbrier (Smilax) as a typical vine, with saw greenbrier (Smilax bona-nox), roundleaf greenbrier (Smilax rotundifolia), bristly greenbrier (Smilax tamnoides), laurel greenbrier (Smilax laurifolia) occurring within various forest zones at the park.

Greenbrier species such as cat greenbrier (Smilax glauca) and roundleaf greenbrier (Smilax rotundifolia) dominate the blackberry-greenbrier successional shrubland thicket, which are found in wet areas near power lines. The Zomlefer et al. (2013) survey of the vascular plants within the park additionally noted the species above but included the common name of white greenbrier for (Smilax glauca) and the presence of Smilax smallii, lanceleaf greenbrier (USDA 2021).

Native to North America and closely related to daylilies, lilies, and yucca (Czarnota 2014), species of greenbrier were used for food and medicine by Native American tribes (Jefferson Patterson Park and Museum 2021). This is one example of how Creek heritage and culture was carried and adapted over time and space (Griffis email communication May 1, 2020).

**Ocmulgee skullcap (Scutellaria ocmulgee).** The Ocmulgee skullcap, a rare herbaceous perennial plant that is a member of the mint family, was first described in 1898 by botanist J.K. Small (Everglades Digital Library 2021; USFWS 2020; Vance et al. 2010; Chafin 2008), who collected the type specimens on the banks of the Ocmulgee River above Macon in July 1895 (Small 1898). This species was identified as an important environmental resource by the Muscogee (Creek) Nation and noted by tribal members as only growing along the Ocmulgee River within the Ocmulgee River Corridor Cultural and Archeological District and in a few counties near Augusta, Georgia (Turner, tribal consultation meeting April 28, 2020). The US Fish and Wildlife Service identified the Ocmulgee skullcap in only the Savannah River and Ocmulgee River watersheds. The US Fish and Wildlife Service has proposed listing the species as threatened and designating critical habitat under section 7 of the Endangered Species Act (USFWS 2022a).
Within the Ocmulgee River Corridor Cultural and Archeological District, the Ocmulgee skullcap has been found on Brown’s Mount (Turner, tribal consultation meeting April 28, 2020).

Giant cane (*Arundinaria gigantea*). Platt et al. (2009) note that cane (*Arundinaria spp.*) was one of the most important plant resources for Native Americans living in the southeastern United States before the arrival of Europeans. Cane was used for building houses, structures, and defenses and was also used for weapons, hunting and fishing implements, domestic items and personal adornment, musical instruments, and the construction of watercraft. Cane was also used for food, medicine, and fuel. Canebrakes provided agricultural land, as well as forage for livestock and important habitat, for game.

The Jordan et al. (2014) survey of the vegetation within Ocmulgee Mounds National Historical Park noted the presence of giant cane (*Arundinaria gigantea*). The US Department of Agriculture recognizes the cultural significance of giant cane and notes that uses of giant cane include forage for cattle, horses, hogs, and sheep; for fishing poles; and for pipe stems, baskets, and mats (Magee 2005).

River cane is a culturally important plant to members of the Muscogee (Creek) Nation. Tribal citizens collect river cane at the Ocmulgee River and bring it back to Oklahoma for planting (Turner, tribal consultation meeting April 28, 2020).

Yaupon (*Ilex vomitoria*). During the course of research, the study team found a statement from Emman Spain, the then-tribal historic preservation officer for the Muscogee (Creek) Nation, stating that pottery found in the Earth Lodge at Ocmulgee Mounds National Historical Park contained residue of the “black drink,” which was used during important meetings (Spain in Lee 2014). Burials within Mound C on the Macon Plateau contained grave goods of undecorated conch cups and dippers, which, Fairbanks hypothesized, were used for the consumption of “black drink” (Fairbanks 1956). In other contexts, decorated conch cups and dippers are associated with the Southeastern Ceremonial Complex and the consumption of “black drink,” so a conclusion about the cups and dippers from Mound C is uncertain (Metcalf 2017).

Swanton states that “black drink” was brewed from *Ilex vomitoria* (Swanton 1922), though other plants may have also been used (Immel 2001). Yaupon was used by most, if not all, tribes in the southeastern United States for medicinal purposes, for hunting and fishing, and for trade. “Black drink,” sometimes also known as “white drink,” is made from the leaves and shoots of yaupon and was used ceremonially, medicinally, and socially (Bolfing 2012; Immel 2001). Yaupon is found within Ocmulgee Mounds National Historical Park (Jordan et al. 2014).

**Resource Collection Sites**

**Fishing weirs.** As noted during tribal consultation, fishing weirs may be within the Ocmulgee River Corridor Cultural and Archeological District that are culturally important to the Muscogee (Creek) Nation (Butler, tribal consultation meeting April 28, 2020).

**Clay outcroppings.** Clay outcroppings within the Ocmulgee River corridor were noted as important cultural resources. The Muscogee (Creek) Nation declined to show their location during the consultation and indicated that this information could be shared in the future (Turner, tribal consultation meeting April 28, 2020).
Cultural Identity and Continuity

Bird effigies. The cultural importance of the bird effigy within the Earth Lodge at Ocmulgee Mounds NHP was mentioned in the 2014 Ethnographic Overview and Assessment of Ocmulgee National Monument. Theodore Isham, former tribal historic preservation officer for the Muscogee (Creek) Nation, mentioned that the bird effigy has continued into modern Creek societies and that New Tulsa etvlwv (tribal town) still builds a bird as their mound (Isham in Lee 2014).

Name of capital in Oklahoma. After removal, Ocmulgee etvlwv was established in Oklahoma, and Ocmulgee etvlwv “furnished three chiefs to the Creek Nation—Joe Perryman, Legus Perryman, and Pleasant Porter—and a number of leading men besides” (Swanton 1922 in Lee 2014). The association with national leadership and the Ocmulgee etvlwv resulted in adopting Okmulgee as the name for the capital of the Muscogee (Creek) Nation (Butler, tribal consultation meeting December 18, 2020; Spain in Lee 2014; Lee 2014). The capital town relocated several times, and by 1868, the present location was chosen to establish the central Creek Council House (Lee 2014). As further evidence of cultural continuity despite removal, the “Mound Building” at tribal headquarters houses the Muscogee (Creek) National Council, including the executive, legislative, and judicial branches, and features architecture that mimics that of the mounds in the Ocmulgee River corridor (Muscogee [Creek] Nation 2016).

Placenames in the Ocmulgee River corridor and Creek language. Many names within the Ocmulgee River corridor originate from Creek language dialects. The name Ocmulgee comes from the Muscogee word “okimulgee,” meaning big, boiling, or bubbling waters/spring (Ray and Smith 2021; Butler, tribal consultation meeting December 18, 2020; New South Associates 2020; Lee 2014). An additional definition may mean “for all of us” and indicates a connection between the Ocmulgee etvlwv in the East and the Creek Nation in the West (Freeman in Lee 2014).

<table>
<thead>
<tr>
<th>Type</th>
<th>Resource</th>
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</thead>
<tbody>
<tr>
<td>Ethnographic Site</td>
<td>Ocmulgee Old Fields traditional cultural property</td>
</tr>
<tr>
<td>Ethnographic Vegetation</td>
<td>Ocmulgee skullcap</td>
</tr>
<tr>
<td></td>
<td>(Scutellaria ocmulgee)</td>
</tr>
<tr>
<td></td>
<td>Giant cane (Arundinaria gigantea)</td>
</tr>
<tr>
<td></td>
<td>Yaupon (Ilex vomitoria)</td>
</tr>
<tr>
<td></td>
<td>Fishing weirs</td>
</tr>
<tr>
<td>Ethnographic Resource</td>
<td>Clay outcroppings</td>
</tr>
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<td>Collection Sites</td>
<td>Bird effigies</td>
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<tr>
<td>Cultural Identity</td>
<td>Capital name in Oklahoma</td>
</tr>
<tr>
<td>and Continuity Resources</td>
<td>Placenames in the Ocmulgee River corridor</td>
</tr>
</tbody>
</table>

Sites Not Contributing to NHL Criterion 1 or NHL Criterion 6

Additional sites were excavated or surveyed during the New Deal archeology programs, and more sites were identified during tribal consultation associated with Creek heritage, history, and cultural identity. Evaluation of the available documentation for these sites, however, revealed either a lack of physical integrity and diminished ability to continue to convey new information or an absence of significant documentation supporting their continued research potential. The National Park Service determined that these sites do not contribute to the significance of the area and were therefore dismissed from further study. Table 3 includes a list of sites within the Ocmulgee River Corridor Cultural and Archeological District that were determined by the study team to be noncontributing to the national significance of the district.
Table 3. Noncontributing Archeological Sites within the Ocmulgee River Corridor Cultural and Archeological District

<table>
<thead>
<tr>
<th>Site Name</th>
<th>New Deal Program</th>
<th>Comments</th>
<th>Integrity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adkins Mound</td>
<td>» WPA 1936</td>
<td>This site, a low conical mound, was located on the same terrace as the Swift Creek site and had elements of the Archaic and Woodland periods. It was partially excavated during the New Deal archeology programs and later destroyed by the installation of Interstate 16 and the Cochran Short Route interchange in the 1960s and 1970s.</td>
<td>Destroyed</td>
</tr>
<tr>
<td>Shell Rock Cave</td>
<td>» WPA 1935;</td>
<td>This rock shelter is located on Brown’s Mount under a limestone overhang. It comprises lithics and ceramics from the Archaic and Woodland periods. It was excavated during the New Deal archeology programs, though documentation is incomplete.</td>
<td>Unknown. Documentation incomplete</td>
</tr>
<tr>
<td></td>
<td>» and/or 1937</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and 1938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuft Springs</td>
<td>» CWA 1933</td>
<td>This mound and village site represent a diverse artifact assemblage of the Archaic and Woodland periods. Documentation from C.C. Harrold (1933) stated that Linton Solomon recorded the mounds as first reported by Colonel Benjamin Hawkins in 1797. In 1797, they were around 6 feet and 2 feet in height. In 1933, however, the mounds were reported as flat and under cultivation and that plows would turn up human remains. In 1937 and 1938, the site was excavated as part of the New Deal archeology programs.</td>
<td>Vandalized and destroyed</td>
</tr>
<tr>
<td>Sites 1</td>
<td>» CCC 1937;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Willey’s CCC stratigraphic survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gledhill 1</td>
<td>» NA</td>
<td>This lithic scatter features elements from the Archaic period as well as an unknown precontact period. The site may be part of a larger combined site that includes Gledhill 2 (9B118) and Gledhill 3 (9B127), but this is not yet clear. A 1986 GASF form, completed by Thomas Gresham, states that the site is heavily disturbed, not eligible for the National Register of Historic Places, and did not recommend further work.</td>
<td>Heavily disturbed. No further research potential.</td>
</tr>
<tr>
<td>Site Name</td>
<td>New Deal Program</td>
<td>Comments</td>
<td>Integrity</td>
</tr>
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</tr>
<tr>
<td>Tuft Springs Sites 2</td>
<td>» CCC 1937; Willey's CCC stratigraphic survey</td>
<td>This village site provided information into indigenous ways of life during the transition from the Archaic and Woodland periods. The site was excavated as part of the New Deal archeology programs. Bland (2001) notes that relocating Tuft Springs Sites 1 and 2 (9BI19) has been difficult, as the mounds have been plowed down, historic documents list only one archeological site, and there are several “Tuft Springs” in the area. According to a 2006 report by the Macon-Bibb County Planning and Zoning Commission, the site has been razed and possibly destroyed.</td>
<td>Vandalized and destroyed</td>
</tr>
<tr>
<td>Southern Railway Drawbridge Site (Draw Bridge)</td>
<td>» NA</td>
<td>This site, previously assigned state site number 22BI36, is an artifact scatter within the Ocmulgee River floodplain near a point where the railroad crosses the river. The artifacts date from the Woodland, Mississippian, and postcontact Creek periods. The site is listed within the Revised National Register of Historic Places Determination of Eligibility: Ocmulgee Old Fields Traditional Cultural Property (1999).</td>
<td>Artifact scatter. Documentation incomplete</td>
</tr>
<tr>
<td>Rutland, Campbell Farm</td>
<td>» Undetermined</td>
<td>This site comprised a surface collected lithic scatter. Originally assigned state site number 24BI30, information about the site has been lost in the subsequent years. The NPS Southeast Archeological Center (SEAC) noted that the site was investigated under the New Deal program in Georgia and had an accession number assigned to it (SEAC-00233). There is no other site documentation.</td>
<td>Surface collection. Documentation incomplete</td>
</tr>
<tr>
<td>Marshall's Mill</td>
<td>» 1934–1935</td>
<td>This site is a 19th- and 20th-century mill that was identified as part of the New Deal archeology program with the original state site number of 29BI35. Bland (2001) reports that the site also has a Mississippian period component but incorrectly lists the state site number as 9BI35. Marshall's Mill appeared on site and artifact inventories from 1934–1935 and the NPS Southeast Archeological Center gave this site an accession number (SEAC-00238). The old state site number (29BI35) has been subsumed under accession SEAC-00122. Reviewing the SEAC accession documentation may lead to future research.</td>
<td>Documentation incomplete</td>
</tr>
<tr>
<td>Site Name</td>
<td>New Deal Program</td>
<td>Comments</td>
<td>Integrity</td>
</tr>
<tr>
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</tr>
<tr>
<td>Cherokee Brick and Tile Company</td>
<td>» Undetermined</td>
<td>According to documentation at the Southeast Archeological Center, the original state site number is 30BI41, and the site was investigated during the New Deal archeology programs. Information about the site has been lost in the subsequent years. Bland (2001) proposes a location for the site; however, the location of 9BI30 could not be confirmed.</td>
<td>Documentation incomplete</td>
</tr>
<tr>
<td>Brick Burns G</td>
<td>» NA</td>
<td>This artifact scatter, located on a sand bar along the western side of the Ocmulgee River, represents the Woodland, Mississippian, and postcontact Creek periods. The artifacts recovered from this site may have eroded out of and washed away from a site somewhere upriver, but the primary deposition location has not yet been located.</td>
<td>Secondary deposition. No primary scientific significance</td>
</tr>
<tr>
<td>Unnamed Site</td>
<td>» NA</td>
<td>This artifact and lithic scatter of the Woodland, Mississippian, and postcontact Creek periods is located on a ridge nose. As recorded in 2019, the site has been impacted by modern ground disturbance and lacks significant data potential. The site was recorded as more than 50% disturbed through mechanical grading, pipeline construction, and forest clearing.</td>
<td>Disturbed. Lacks data potential</td>
</tr>
<tr>
<td>Red Bluff</td>
<td>» March–April 1934</td>
<td>The Southeast Archeological Center identifies this site as a surface collection of sherds and lithics from Durden’s Farm on Stone Creek, collected in 1934. The site is present on two site and artifact inventories from 1934–1936 as part of the New Deal archeology programs. The Southeast Archeological Center also records the original site number as 27BI33 and the site’s location as along Echeconnee Creek. Recorded under accession SEAC-00236 information is also within SEAC accession SEAC-00122.</td>
<td>Surface collection. Documentation incomplete</td>
</tr>
<tr>
<td>ESI Temp Site 3</td>
<td>» NA</td>
<td>This site, also called Ochese Riverpark, is an artifact scatter and contains features of an unknown Native American time period and non-Native 19th- and 20th-century periods. Hammack (2008, 2018) suggests that the site is thought to be a lost postcontact Creek town. The site has been razed and redeposited, though may retain research potential in terms of other submerged towns within the Ocmulgee River corridor.</td>
<td>Razed and redeposited</td>
</tr>
<tr>
<td>Site Name</td>
<td>New Deal Program</td>
<td>Comments</td>
<td>Integrity</td>
</tr>
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</tr>
<tr>
<td>No Name (Indian Cemetery)</td>
<td>» 1937</td>
<td>The site was reported by Oliver Shelton in 1937. In C.C. Harrold's notes (1937), the site is described as an “Indian burying ground” of an unknown time period or cultural affiliation. The site was located within a “circle of trees in open field N. of Big Indian Creek, 1.5 miles from Ocmulgee River, on land next to land owned by Sledhill” [Gledhill?]. The Georgia Archaeological Site Files state that the site has been razed.</td>
<td>Razed</td>
</tr>
<tr>
<td>Bluff Edge Megasite</td>
<td>» NA</td>
<td>The site comprised an artifact and lithic scatter and represents the Paleoindian, Archaic, Woodland, Mississippian, postcontact Creek periods, and 19th and 20th century. This site is located on an upland flat adjacent to the marsh's edge in a residential area at Robins Air Force Base and has been graded and cultivated.</td>
<td>Graded. Residential development</td>
</tr>
<tr>
<td>Bluff Edge Golf Course</td>
<td>» NA</td>
<td>The site is an artifact and lithic scatter located on Robins Air Force Base on the Pine Oaks Golf Course fairways (1–6). The site dates to the Archaic, Woodland, and Mississippian periods. Recovered artifacts include identifiable and dated projectile points, steatite bowl fragments, and decorated pottery sherds. The site is described as graded and cultivated, due to the impacts of the fairways and greens construction and reconstruction.</td>
<td>Graded. Impacted by golf course.</td>
</tr>
<tr>
<td>Officers’ Hillside and 4th Green</td>
<td>» NA</td>
<td>The site is a ceramic and lithic scatter dating to the Archaic and Woodland periods and an unknown precontact period. The site is located near residential buildings on a portion of the 4th green of the Robins Air Force Base's Pine Oaks Golf Course.</td>
<td>Graded. Impacted by residential development and golf course</td>
</tr>
<tr>
<td>Echeconnee Creek Inlet</td>
<td>» NA</td>
<td>This site is a lithic and ceramic scatter that expresses the Archaic, Woodland, Mississippian, and postcontact Creek. The creation of runways at Robins Air Force Base has led to the site being redeposited and cultivated.</td>
<td>Redeposited</td>
</tr>
<tr>
<td>Site Name</td>
<td>New Deal Program</td>
<td>Comments</td>
<td>Integrity</td>
</tr>
<tr>
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</tr>
<tr>
<td>Hartford Mound</td>
<td>» CCC 1940</td>
<td>This Archaic and Woodland period village and mound site was visited by Linton Solomon and Charles Fairbanks on May 5, 1940. The site was not mapped. Site files state that the site was completely destroyed by WPA road grading with the mound graded down and village extensively scraped. Documentation from 1990 described the mound as leveled and noted that a transmission line runs through a portion of the redeposited mound fill. Intact deposits and subsurface features were assumed present but not found along the transmission line.</td>
<td>Destroyed</td>
</tr>
<tr>
<td>No Name (Shell and Ceramic Scatter)</td>
<td>» NA</td>
<td>This site is an artifact and lithic scatter that dates to Archaic, Woodland, and Mississippian periods. The site is located on a river terrace and has three loci which were investigated in 1993 as part of a survey for a gas pipeline corridor.</td>
<td>Artifact scatter. Impacted by 1993 pipeline construction</td>
</tr>
</tbody>
</table>

Notes: CWA – Civil Works Administration; FERA – Federal Emergency Relief Administration; WPA – Works Progress Administration; CCC – Civilian Conservation Corps
Comparative Analysis

Since the resources within the Ocmulgee River Corridor Cultural and Archeological District make up a historic district with thematic significance related to Creek heritage and New Deal archeology, this section presents a description of sites elsewhere that have been recognized for their national significance around these themes and their comparison to conditions, resources, and opportunities in the Ocmulgee River Corridor Cultural and Archeological District.

Creek Heritage

Creek National Capitol (Creek Council House), Okmulgee, Oklahoma (NRHP Listing 1966; NHL Designation 1961; Period of Significance: 1878–1907 CE; Muscogee [Creek] Nation)

The Creek National Capitol (Creek Council House) is a National Historic Landmark that is significant for its engineering and for its association with Native American culture (Weiss 1975). The site was recognized as possessing exceptional historic value in the supplement titled Indian Affairs to the National Park Service study Westward Expansion and Extension of the National Boundaries 1830–1898: Military and Indian Affairs (1959) (DOI 1961; NPS 1959).

After removal to Indian Territory (Oklahoma) between 1836–1840, the Muscogee people replicated their livelihood along river valleys and rebuilt their nation, though earlier factional divisions remained (Peters, 2012; Weiss 1975). Lower Muscogee people located their farms on the Arkansas and Verdigris rivers, and Upper Muscogee people reestablished their ancient towns on the Canadian River and its northern branches (Muscogee [Creek] Nation 2016). After the American Civil War, the Muscogee territory was reduced by a treaty in 1866 (Peters, 2012), and a new capital was established on the Deep Fork of the Canadian at Okmulgee in 1867, the same year the Muscogee people adopted a written constitution and included formerly enslaved persons as members of the tribe (Muscogee [Creek] Nation 2016; Peters 2012).

In 1878, the Muscogee (Creek) Nation constructed a two-story sandstone Council House to replace an 1868 log structure. The Council House housed the governing bodies of the Creek Nation, the House of Kings, and the House of Warriors as well as the Supreme Court. It served as the location for meetings of the Creek Indian Council until 1907, when Oklahoma became a state. As Weiss states “The structure stands as symbol of the resourcefulness and flexibility of the Creeks, one of the so-called five ‘civilized’ tribes who, despite years of injustice, assimilated aspects of American and European culture while not losing their own identity.” Additionally, periodically the Intertribal Council, composed of delegates from most of the tribes residing in Indian Territory, also met at the Council House to discuss problems as well as a system of self-government. The stone Council House is still the center of Okmulgee, Oklahoma (Muscogee [Creek] Nation 2016; Peters, 2012; Weiss 1975; NPS 1959).

A railroad constructed across Creek lands in 1872 saw Indian Territory opening to European American settlement and experiencing additional pressure from the federal government (Weiss 1975). The work of the Dawes Commission in the late 1800s for the allotment of the Muscogee (Creek) Nation’s territory and the passing of the Curtis Act by the US Congress 1898 threatened the end of the Muscogee (Creek) Nation (Muscogee [Creek] Nation 2016). Creek sovereignty was abolished by the federal government in 1906, though tribal government was still allowed to exist.
In 1907 the Council House was leased to Okmulgee County for use as the Okmulgee County Courthouse, and in 1919 the City of Okmulgee purchased the Council House from the US Department of the Interior, which was authorized by Congress to take possession of all tribal lands (Plummer 2010). From 1907, when Oklahoma became a state, to 1971, tribal chiefs were not elected by Creeks but were appointed (Weiss 1975). By 1971, the Muscogee people elected a principal chief without approval of the president of the United States, and from the 1970s to the 1980s, the Muscogee people adopted a new constitution, revitalized the National Council, underwent political and economic development, and had their rights to self-government affirmed (Muscogee [Creek] Nation 2016).

Many of the Muscogee Creek tribal towns and ceremonial grounds in Oklahoma retain their names from their locations in the east before removal. In the case of the 16 ceremonial grounds, many have also maintained their sacred fire, continuously burning from embers gathered in the East before their forced removal from their homelands. The grounds serve many of the social, political, and spiritual purposes as the original tribal towns in the East (Peters, 2012). In the 20th century, new laws encouraged Creek tribal cultural and economic development and, since their cultural, social, and political systems survived, such development has occurred (Weiss 1975), including the repossession of the Council House by the Muscogee (Creek) Nation in 2010 (Plummer 2010).

As the capitol of the Muscogee (Creek) Nation after removal to Oklahoma, the Council House represents the cultural heritage of Creek people in the west, which is inseparable from their cultural heritage in the east.

The Council House is a manifestation of the continuation of Creek cultural, social, political, and economic systems from their eastern buildings, sites, structures, objects, and cultural landscapes under NHL criterion 1 in this evaluation, across the period of forced removal, until today.

Yuchi Town Site, Alabama (NRHP Listing 1996; NHL Designation 1996; Period of Significance: 1716–1836; Fort Benning, Department of Defense)

The Yuchi Town Site (1RU57 and 1RU63) is a large precontact and postcontact site situated on the Fort Benning Military Reservation overlooking the Chattahoochee River in Russell Country, Alabama. The site is on a broad terrace that rises about 30 feet above the river, and the two site numbers reflect the western/downstream portion of the site (1RU57) and the eastern/upstream portion of the site (1RU63) (Hargrave et al. 1998; Braley 1992). The site is nationally significant under NHL criteria 1 and 6 under the 1987 NHL theme and subthemes of Cultural Developments: Indigenous American Populations; Ethnohistory of Indigenous American Populations; Varieties of Early Conflict, Conquest or Accommodation; Forced and Voluntary Population Movements; and The Changing Cultural Geography of the Southeast. The site’s areas of significance are Archeology-historic aboriginal, and its cultural affiliations include Apalachicola (Hitchiti-ancestral Creek) and Yuchi (Braley 1992). The site was listed in the National Register of Historic Places and designated a National Historic Landmark on June 19, 1996, as a result of the NPS Southeast Regional Office’s historic sites theme study. The site was identified in this study as significant under the NHL Theme of Cultural Developments: Indigenous American Populations and the subtheme, The Ethnohistory of Indigenous American Populations (Barnes 1992).
The site was a major 18th-century Lower Creek village and is the largest known postcontact village associated with the Yuchi Tribe, who lived here from 1716–1836 when they were forcibly removed to Oklahoma. (Hargrave et al. 1998; Braley 1992). The Yuchi Tribe was an allied tribe of the Creek Confederacy, retaining its own language and customs (Wright 1986), and the village was established at the end of Yamasee War (about 1715–1716) as Creek people returned to the Chattahoochee River Valley (Hargrave et al. 1998). Before the Yamasee War, Yuchi people resided in the Ocmulgee River Valley (1681–1716), and before this from 1670–1681, they lived in the Savannah River Valley near Augusta (Braley 1992). Many Yuchi people forcibly removed to Oklahoma were and still are counted as part of the Creek Nation (Wright 1986). Though living in Oklahoma, contemporary Yuchi recognize Yuchi Town as an ancestral home (Hargrave et al. 1998) and the site retains great social and religious significance to living Yuchi people today (Hargrave et al. 1998; Braley 1992).

Yuchi Town also has evidence for an earlier, late-17th-century, Apalachicola, settlement. (Hargrave et al. 1998; Braley 1992). The Apalachicola people spoke Hitchiti, a Muskogean dialect, and after moving to the Chattahoochee River Valley became associated with Lower Creek peoples. During the removal of Native Americans into Indian Territory (Oklahoma), the Apalachicola people settled with the Creek from Alabama south of Okmulgee, Oklahoma. Their town, Tulwa Thlocco, was one of the 44 tribal towns comprising the Creek Nation before Oklahoma’s statehood. They are considered ancestors to some contemporary Creek people (Wright 1986).

The Yuchi Town site shares similarities with the sites within the Ocmulgee River corridor as an example of postcontact Native Americans adopting various strategies to maintain their cultural integrity in the face of European colonization and American expansion (Braley 1992). The town is also similar in its significance as an ancestral town to living Yuchi people and Apalachicola descendants associated with the Creek Nation. However, the inhabitation of the site itself was for a more limited period of time than the sites within the Ocmulgee River corridor.

New Deal Archeology Excavations (1930–1940s)

Shiloh Indian Mounds Site, Tennessee
(NRHP Listing 1979; NHL Designation 1989; Period of Significance: 500–1000 CE and 1400–1600 CE; Part of Shiloh National Military Park, NPS)

The Shiloh Mounds and Village complex (40HR7) is a National Historic Landmark significant for precontact archeology, specifically the Woodland and Mississippian periods. While the nomination does not contain a specific notation of national significance under NHL criterion 6 (Barnes 1988), correspondence attached to the nomination indicate support for the criterion (Bearss 1988; Levy 1988). The site is significant as the largest extant, fortified Mississippian ceremonial mound complex in the Tennessee River Valley, as a source for testing existing chronology of Mississippian sites in the Tennessee River Valley, and for new theories on Mississippian period subsistence, and social and political organization. The site is located within the boundary of Shiloh National Military Park, south of Pittsburg Landing and Dill Branch on bluffs overlooking the Tennessee River.
While the park was established in 1894 to commemorate the significant battle on April 6–7, 1862, as part of the Corinth Campaign of the Civil War, the park also preserves this significant Native American mound and village site (Anderson, Cornelison, and Sherwood 2013; Barnes 1988).

The fortified mound and village complex is approximately 55 acres and includes the remains of an extensive palisade line and earth embankment, dozens of small circular rises or house mounds, and six large Late Mississippian flat-topped mounds (Mounds A, B, D, E, F, and G). The complex also includes one dome-shaped Late Woodland burial mound (Mound C), arranged around a central plaza. Mound A is one of the largest precontact Mississippian period Native American mounds in the Tennessee River Valley and one of the largest mounds on land managed by the National Park Service. The mound and village complex were built between 950–1350 CE, and near the later part of this range, the site was the political and ceremonial center of the Mississippian society dominating the middle and lower Tennessee River Valley (Anderson, Cornelison, and Sherwood 2013; Barnes 1988).

A number of archeological excavations have taken place at the mound complex since the 1890s (Anderson 2013), with the first occurring in 1899 by the early superintendent Colonel Cornelius Cadle. Cadle dug into the center of Mound C, where he uncovered a log tomb, three burials, and a human effigy pipe. In 1915, Clarence B. Moore investigated the site, but he did not conduct excavations. Moore drew the first map of the site and documented the state of the site, including intrusions such as the superintendent’s house on top of Mound A, and the internment and removal of Civil War dead from Mound G (Barnes 1988). In the summer of 1933, Shiloh National Military Park was transferred from the War Department to the National Park Service (Anderson 2013).

Later that same year, the only major archeological excavation of the complex was conducted by Dr. Frank H. H. Roberts Jr. and his assistant, Moreau B. Chambers of the Bureau of American Ethnology, Smithsonian Institution. The excavations, which consisted of up to 24 trenches and profiling, lasted from 1933 into 1934 and were part of the Civil Work Administration program (Barnes 1988), which was part of the New Deal archeology programs (Roller and Moyer 2020; Anderson 2013). No final report exists from this New Deal excavation, and a lack of site plan makes it difficult to determine where the excavations occurred. Using extant field notes and preliminary reports from these excavations, in the late 1970s, Dr. Gerald P. Smith (Memphis State University, contracted by the National Park Service) was able to identify important features of the site, including profiles of the excavations, 30 precontact houses, a possible temple complex, and refuse deposits. Dr. Smith characterized the site as the most extensive mound-and-plaza complex in the Tennessee River Valley and possibly the best-preserved Mississippian fortification system in the nation (Barnes 1988). Little else had been written and published before the Southeast Archeological Center’s excavations in 1999–2004 (Anderson, Cornelison, and Sherwood 2013).

The site shares similarities with the mound and village complexes at the Macon Plateau and Lamar sites within Ocmulgee Mounds National Historical Park and with other archeological sites along the Ocmulgee River corridor. Additionally, the New Deal excavations at Shiloh and at sites along the Ocmulgee River corridor had an impact on the field of archeology, testing chronological sequences and advancing new theories about the Mississippian period people. At Shiloh, however, the excavations did not continue for as many years as the excavations at Ocmulgee, nor was a final report or map created that showed the location or extent of the excavations.
In the 40 years between Robert’s and Smith’s excavations, other archeological work in the Tennessee River Valley developed a ceramic cultural chronology. These other excavations allowed Smith to identify the occupations at Shiloh when he analyzed Robert’s material (Barnes 1988). Because of this lack of documentation and analysis at Shiloh until the 1970s and the development of cultural sequences at other archeological sites in the Tennessee River Valley, the New Deal excavations associated with the Ocmulgee River corridor may be considered as having had a bigger impact on the science of archeology and the development of federal cultural resource management.

**Marksville Prehistoric Indian Site, Louisiana (NRHP Listing 1966; NHL Designation 1964; Period of Significance: Middle Woodland (about 100 BCE–500 CE), Louisiana State Park)**

Marksville Prehistoric Indian Site is located within the Marksville Prehistoric Indian State Park and is nationally significant under the National Survey of Historic Sites and Buildings Archeology themes II and III, Early Indian Farmers and Villages and Communities (1963). This type-site is for the Marksville culture, identified in the 1930s, which led to the recognition that this culture was widely spread over the eastern United States. This type-site is the best example of connections between the Ohio Hopewell and Native people living in the south and is the best-known sequence in the Southeast. The site is composed of restored mounds and a surrounding earthwork (Griffin 1964; Haag et al. 1963).

The site was first and preliminarily excavated by Gerard Fowke of the Bureau of American Ethnology, Smithsonian Institution in 1926, and Fowke recognized the relationship of the site to the Ohio Hopewell culture. There were subsequent investigations in 1933 by Frank Setzler of the US National Museum, and James A. Ford of the School of Geology, Louisiana State University. Louisiana State University further sponsored a statewide Works Progress Administration (WPA) archeological survey, excavating mounds 14–20 (Ford n.d.). These WPA excavations represent the first federally funded New Deal archeological excavations directed by Frank Seltzer and James A. Ford. The excavations, lasting from August to November in 1933, were conducted under the auspices of the Federal Emergency Relief Administration, which was later superseded by federally funded the Works Progress Administration in 1935. The excavations resulted in a greater understanding of the Hopewell culture that extended into the Louisiana region (Roller and Moyer 2020; Anderson, Cornelison, and Sherwood 2013; Means 2013). The success of the New Deal excavations at Marksville encouraged similar projects at other sites, including Ocmulgee (Brown 1996; Means 2013).

As the type-site for the Marksville culture, the site has similarities to other type-sites identified during New Deal excavations within the Ocmulgee River corridor. These include Lamar Mounds (9B12), for its Late Mississippian period culture; Swift Creek (9B13), for its Middle Woodland period culture; Napier (9B19), for its late Woodland Period culture; and Mossy Oak (9B111), for its Middle to Late Woodland period culture. These four type-sites, excavated by New Deal archeologists within the Ocmulgee River corridor, have comparable significance and value for additional study.
CONCLUSION: SUMMARY OF NATIONAL SIGNIFICANCE EVALUATION FOR CULTURAL RESOURCES

The Ocmulgee River Corridor Cultural and Archeological District is a nationally significant historic district for

- the area’s role in development of the discipline of archeology through the New Deal federal work relief programs of the 1930s–1940s
- the area’s continuing cultural importance to descendants of Creek people, who recognize the Ocmulgee River corridor as their traditional homeland
- the area’s precontact and ancestral Creek archeological sites, many of which were investigated during New Deal archeological projects, including the Mississippian-period mounds at Ocmulgee Mounds National Historical Park

This historic district is nationally significant because the New Deal archeology programs that unfolded in this part of central Georgia during the years 1933–1942 helped fundamentally change the practice of archeology in America, leading to advances in theory and methodology that still shape the practice of archeology today. The district’s significance is magnified by its archeological and cultural richness and by the presence of high-integrity archeological and ethnographic resources associated with Creek heritage, which may provide a basis for calling into question, updating, and providing tribal perspectives on New Deal advancements in the field of archeology. The district possesses exceptional value and quality for illustrating and interpreting the heritage of the United States and possesses a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

The Ocmulgee River Corridor Cultural and Archeological District is potentially nationally significant under NHL criterion 1 as the best place to exemplify the New Deal archeology programs and under NHL criterion 6 for the continued research potential of high-integrity cultural and archeological sites. The high-integrity sites include those that can serve to further the science of archeological inquiry and those that can help provide an indigenous understanding of the archeological record that was missing during the New Deal (through the application of traditional knowledge, oral tradition, cultural landscape appreciation, and material culture history). The research potential of these sites can yield missing pieces of the story and serve as a needed corrective by bringing in Native perspectives and by providing opportunities for modern landscape level investigations.

Under NHL criterion 1, the archeological resources of the Ocmulgee River Corridor Cultural and Archeological District are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained. The New Deal excavations, made possible by federally funded work relief programs designed to alleviate the unemployment of the Great Depression, were spread across the nation and revolutionized archeology in the United States. The New Deal excavations within the Ocmulgee River corridor played a significant role in this revolution as archeology was transformed from a hobby into a science. These excavations encouraged the development of standardized survey techniques; the development and refinement of stratigraphic thought, seriation, and chronology; the development of new holistic and dynamic research questions; new interpretations of cultural change and continuity; and the birth of professional cultural resource management.
The New Deal excavations changed the perspective of the federal government regarding infrastructure projects, leading to the passage of laws making impact mitigation a requirement of major undertakings and requiring consultation with tribes and the repatriation of human remains and items of cultural patrimony (NPS 2016d; Means 2013; Schroeder 2013; Grabouski 2011). No previous NHL theme studies discuss the New Deal excavations in the Ocmulgee River corridor, but an NHL theme study was underway during the course of this special resource study titled, “History of Archeology in the United States” (Roller and Moyer 2020). The draft does not discuss the nexus between the New Deal excavations and the cultural continuity from Creek ancestors, who were the subject of these excavations, and descendant Creek peoples living today.

Under NHL criterion 6, the archeological resources of the Ocmulgee River Corridor Cultural and Archeological District have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts, and ideas to a major degree. While the remaining archeological sites and research on newly acquired NPS land can enhance and further the understanding of the physical organization, economy, politics, and religion of a dynamic time in North American history, much can be learned with the information already available. As previously noted, precontact and ancestral Creek cultural sites were excavated during the 1930s and 1940s as part of the federal government’s New Deal archeology programs and other work relief programs. While these projects greatly expanded archeological techniques and science, they operated within a framework that continued a legacy of European American disregard for Native Americans’ continuing ancestral connections, culture, history, worldviews, and traditional ways of knowing. In addition, the work of the New Deal programs created enormous collections and backlogs of reporting that to this day have not been analyzed. Tribal access is currently limited to the existing NPS lands at Ocmulgee Mounds National Historical Park and their own property near Brown’s Mount, but significantly more of their cultural heritage is held privately throughout the archeological and cultural district. As the team learned during consultations, by creating this district, tribal access to their cultural resources and history would be expanded. Partnerships with tribes to manage the expanded district would not only increase tribal access to their cultural heritage but could include reevaluation of the archeological collection and identification of objects of cultural patrimony in ways that incorporate descendant worldviews and ancestral history. Tribes with archeology or cultural resource management programs could conduct the archeological or geophysical surveys necessary to shed new light on Creek ancestral heritage. Heritage management programs that introduce tribal youth to archeology and historic preservation would instill a sense of pride and educate descendants about their ancestral history and works of art. By supporting the interest of tribal youth in archeology and historic preservation, these individuals would bring new perspectives to these fields, which could shed new light on US history.

Although there are no National Historic Landmarks within the Ocmulgee River Corridor Cultural and Archeological District, the district includes Ocmulgee Mounds National Historical Park and the Ocmulgee Old Fields traditional cultural property, of which the national historical park is a component.
Importantly, a finding of national significance in the context of this study is not a finding of eligibility for National Historic Landmark designation consideration. Although the special resource study process uses NHL criteria for evaluation of national significance, any further consideration of these resources for NHL nomination would require consultation with the NHL program for further evaluation and additional guidance. Furthermore, no fieldwork was conducted for this evaluation, which relied upon archeological records of past work that were often unclear on the conditions and integrity of the sites. Field assessments would be necessary to further consider the eligibility of the district as a National Historic Landmark. Lastly, the issue of integrity and conditions at individual sites, if confirmed, could affect the NHL criteria under which the district may be considered eligible. Please see appendix D for more detail on these issues and for the NHL program’s assessment of the national significance findings of the special resource study.

**EVALUATION OF NATIONAL SIGNIFICANCE: NATURAL RESOURCES**

The National Park Service evaluates the national significance of natural resources by applying the National Natural Landmark (NNL) criteria contained in 36 CFR 62 and summarized below. Thus, if a study area meets the criteria for being designated a National Natural Landmark, it is deemed to be nationally significant within the meaning of NPS Management Policies 2006. Note that the findings of the NNL analysis relate only to the determination of the area’s national significance and, if positive, do not confer NNL designation. While the analysis uses the same criteria to determine national significance, the process for NNL designation is distinct from the special resource study process.
Under the NNL program, an area is nationally significant if it is one of the best examples of a biological or geological feature known to be characteristic of a given biophysiographic province (also known as a natural region). The National Park Service uses the following primary criteria to evaluate the relative quality of areas under consideration:

- Illustrative character: The area exhibits a combination of well-developed components that are recognized in the appropriate scientific literature as characteristic of a particular type of natural feature. The character should be unusually illustrative, rather than merely statistically representative.

- Present condition: The area has been less disturbed by humans than other areas.

In addition to these primary criteria, the following secondary criteria are also considered as supporting evidence or as a way to distinguish between sites that rank similarly under the primary criteria:

- Diversity: In addition to its primary natural feature, the area contains high-quality examples of other biological and/or geological features or processes.

- Rarity: In addition to its primary natural feature, the area contains rare geological or paleontological features or biological communities or provides high-quality habitat for one or more rare, threatened, or endangered species.

- Value for science and education: The area contains known or potential information as a result of its association with a significant scientific discovery, concept, or exceptionally extensive and long-term record of on-site research and therefore offers unusual opportunities for public interpretation of the natural history of the United States.

The biophysical provinces used by the NNL program were defined by the National Park Service (1972) based on a modification of Fenneman’s (1928) physiographic divisions.

If a resource is already designated as a National Natural Landmark, the national significance criteria are met without further analysis being required. There are no existing National Natural Landmarks or pending NNL nominations for natural resources in the Ocmulgee River corridor study area.

Among the natural resources in the study area, the following are noteworthy and are analyzed next:

- Bottomland hardwood forests
- Blackland prairies
- Habitat corridor resource

### Analysis of Bottomland Hardwood Forests

**Primary Criteria: Illustrative Character**

Bottomland hardwood forests are one of many important riparian ecosystems in the United States. The term “bottomland hardwoods” was first used to describe forests of the southeastern United States that occurred on river floodplains.
Years later, Huffman and Forsythe (1981) used the term to describe floodplain forests throughout the eastern and central United States that have the following characteristics: (1) the area is periodically inundated or saturated by surface or groundwater during the growing season; (2) soil saturation occurs periodically within the root zone during the growing season; and (3) common tree species in the area have morphological and/or physiological adaptation(s) that allow them to survive, reach maturity, and reproduce in an environment where the soils within the root zone may become anaerobic during periods of the growing season. All of the characteristics of bottomland hardwood forests described above are present in the study area. In addition, patches of giant cane—once ubiquitous across southern bottomlands—are present on the riverbanks, while switch cane is very common in the floodplain.

The study area contains about 55,000 acres of contiguous bottomland hardwood forests, representing the largest block of forested habitat in the upper Coastal Plain in Georgia (NPCA 2017). These habitats support a variety of wildlife groups, including neotropical migratory birds, bats, waterfowl, wild turkey, large mammals, reptiles, and amphibians.

The US Fish and Wildlife Service, in its management plan for the Bond Swamp National Wildlife Refuge, has documented that more than 200 species of birds, 80 species of reptiles and amphibians, 100 species of fish, and 50 species of mammals call the forests along the Ocmulgee River home.

In the Bond Swamp National Wildlife Refuge (referred to hereafter as “refuge”), principle overstory species within bottomland hardwood and swamp forest types include water tupelo (also referred to as “tupelo gum”) (*Nyssa aquatica*); black gum (*Nyssa sylvatica*); red maple (*Acer rubrum*); sweetgum (*Liquidambar styraciflua*); elm (*Ulmus spp.*); ash (*Fraxinus spp.*); hickory (*Carya spp.*); and water, willow, overcup, cherrybark, and swamp chestnut oaks (*Q. nigra, Q. phellos, Q. lyrata, Q. pagoda*, and *Q. michauxii*). Swamp forests are essentially the lowest areas of bottomland systems and are distinguished as being subject to extended or very regular periods of inundation. As bottomland forests grade into swamps, tree species diversity decreases and forests tend towards dominance by water tupelo and, in the southern part of the study area, bald cypress. Beaver ponds and oxbow-type lakes can lead to significant portions of refuge floodplains remaining inundated throughout the year, allowing the establishment of submerged and emergent aquatic plant communities. Within the 4,300 acres of floodplain forest in the main portion of the refuge as of 2002, the forest age was estimated to range from 30 to >120 years (Wright 2002).

Common mid- and understory species in bottomlands within the refuge include poison ivy (*Toxicodendron radicans*), rattan vine (*Berchemia scandens*), flowering dogwood (*Cornus florida*), Eastern hophornbeam (*Ostrya virginiana*), boxelder (*Acer negundo*), privet (*Ligustrum spp.*), and others. Giant cane (*Arundinaria gigantea*) is present sporadically in small patches.
Within the refuge, significant patches of bottomland forest habitat are closed canopy and lack understory complexity, particularly in interior stands away from roads, old logging operations, and other disturbed areas. Nonetheless, areas do exist where mid- and understory strata are quite well developed, providing important structure and foraging/nesting substrates for many wildlife species.

In a recent boundary study covering the Ocmulgee Old Fields area below Macon, the National Park Service (2014c) notes that the landscape between Ocmulgee Mounds National Historical Park and Bond Swamp National Wildlife Refuge is very similar to what is found at the refuge.

At Robins Air Force Base further south in the study area, southern floodplain forest is present on bottomlands associated with streams and rivers (USAF 2017). The largest parcel of undeveloped land is the bottomland forest located on the Horse Creek/Ocmulgee River floodplain on the eastern side of the base. This section includes a seasonally flooded old-growth bottomland hardwood forest characterized by an overstory comprising a variety of oaks and other hardwoods. Interspersed among this bottomland forest are tupelo sloughs. The floodplain of Sandy Run Creek that flows along the southern boundary of the base also is relatively undisturbed bottomland forest. This natural swamp forest community has a canopy dominated by sweetbay magnolia (Magnolia virginiana), redbay (Persea borbonia), blackgum, sweetgum, red maple, and water oak.

At Ocmulgee Wildlife Management Area, bottomland hardwoods are associated with the floodplain of the Ocmulgee River, Magnolia and Shellstone Creeks, Carden Branch, and smaller creeks and drainages (GA DNR 2010).

Much of the floodplain has been heavily and recently impacted by selective hardwood cutting (GA DNR 2010). At Oaky Woods Wildlife Management Area, bottomland hardwoods are associated with the floodplain of the Ocmulgee River, Big Grocery Creek, Little Grocery Creek, Beaver Creek, and the associated drainages (GA DNR 2014).

Historically, the study area was illustrative of bottomland hardwood forests that contain extensive canebrakes, particularly of giant cane (Arundinaria gigantea). Meanly (1972) reported that the largest canebrakes then remaining were in the Ocmulgee Basin south of Macon, although these were but a remnant of the “vast tracts” and “endless cane forests” reported by early writers. There are “thickets” of cane north of Robins Air Force Base up to the southern boundaries of the city of Macon, as well as scattered patches to the south between the base and Hawkinsville (GA DNR 2020a).
Wright (2002) observed that at the refuge, cane is a prominent feature of the understory, particularly on the natural levee adjacent to the river. More specifically, switch cane (*Arundinaria tecta*) is common in the floodplain, while the cane abundant on the riverbanks is likely giant cane (SC DNR 2020). Similar conditions exist further south in Oaky Woods Wildlife Management Area and Ocmulgee Wildlife Management Area (GA DNR 2020b).

But while the study area is an illustrative example of the bottomland hardwood ecosystem, the physical structure of forests within the study area is less intact than other bottomland hardwood forests in the Atlantic Coastal Plain, particularly Congaree National Park, which protects an extensive stand of old-growth bottomland hardwood forest. The comparative integrity of the Congaree National Park forest is exemplified by the numerous national and state champion trees in its old-growth core. Meanwhile, the bottomland hardwood forests of the Ocmulgee River corridor have been logged throughout and are generally quite a bit younger than the old growth at Congaree.

Furthermore, the forest ecosystem in the study area is less functional than the forest ecosystem at Congaree National Park. Resource managers have also reported that privet, an invasive plant species, is present in greater density and distribution in the study area than at Congaree National Park (NPS 2020b). Privet has been identified as one of the “major problem plant species” at Bond Swamp National Wildlife Refuge (USFWS 2009) and is classified as a “serious threat” at Robins Air Force Base (USAF 2017). Invasive Chinese tallow (*Triadica sebifera*) is an increasing presence at the refuge and elsewhere in the floodplain.

The northern section of the study area is notable in that it lacks bald cypress. The refuge’s conservation plan notes that historically, swamps were dominated by bald cypress as well as water tupelo. Some resource managers have reported that the current lack of bald cypress in the northern portion of the study area is possibly due to selective logging (NPS 2020c). However, other resource experts have suggested that the area is likely a water tupelo swamp, as there are no remnant cypress stumps to be seen and no evidence of cypress regeneration anywhere on the refuge (Mercer 2021; see Pyne 2014). As it is less common for bottomland hardwood forests to have water tupelo present without bald cypress, this characteristic of the refuge merits further research to determine if this a naturally occurring phenomenon in the study area, which might distinguish the site.

**Primary Criteria: Present Condition**

The Ocmulgee River corridor in its entirety contains about 85,000 acres of contiguous forest, representing the largest block of forested habitat in the upper Coastal Plain in Georgia. Furthermore, the Ocmulgee River corridor was identified by the Georgia Wildlife Division as an important component of a network of potential “greenways” throughout the state (GA DNR 2015). These greenways are large patches of natural habitat, as well as other areas, that could be conserved or restored to provide for greater habitat connectivity. For an area to be identified as a potential habitat corridor, it needs to be relatively unfragmented with limited development.

However, the floodplains of the Ocmulgee River near Macon have been subjected to increased demands from nearby human populations. A majority of these bottomland forests have been extensively harvested for timber, and portions have been cleared for agricultural purposes.
Images from Froeschauer (1989 in Jordan et al. 2014) show that large areas adjacent to the railroad and the mounds at Ocmulgee Mounds National Historical Park were completely deforested in the early 1900s; other areas were likely also deforested. Much of the privately owned land along the river corridor is managed for timber (GA DNR 2020a). Portions of the refuge, east of the railroad, show evidence of past logging operations. Larger diameter class pines have been removed from the drier, upland areas, while some hardwood was cut from the more accessible bottomlands. In 2002, Wright (2002) analyzed tree ages within 4,300 acres of floodplain forest within the main portion of the refuge and noted that approximate forest age ranged from 30 to >120 years.

In comparison, other bottomland hardwood forests in the Atlantic Coastal Plain have experienced less disturbance, particularly Congaree National Park, which contains 11,000 acres of old-growth bottomland hardwoods. While some of the park area has experienced logging in the past, generally, the fertility of the floodplain, favorable growing conditions, and lack of logging have allowed trees to grow to large sizes. The presence of old-growth bottomland hardwood forests at Congaree National Park indicates that the physical structure of those forests is in superior present condition.

Numerous invasive plant species are present in the study area, including Chinese wisteria (Wisteria sinensis), Chinese privet (Ligustrum sinense), Chinese tallow (Triadica sebifera), Japanese climbing fern (Lygodium japonicum), Japanese stiltgrass (Microstegium vimineum), Chinaberry (Melia azedarach), Japanese honeysuckle (Lonicera japonica), and kudzu (Pueraria montana). Resource managers have specifically called out privet as having more intensely invaded the study area than at Congaree National Park, likely related to more extensive ground disturbance from intensive agriculture going back hundreds of years along the Ocmulgee River corridor (NPS 2020b). In the study area, treatment for invasive plants primarily happens in areas that are already federally owned, including Ocmulgee Mounds National Historical Park, Bond Swamp National Wildlife Refuge, and Robins Air Force Base.

Feral hogs, a nonnative invasive species, have caused damage to a variety of habitats in the study area, although the damage is not necessarily greater than in other river floodplains across the region. Feral hogs consume items from across the food web, including roots and vegetation, hard and soft mast, invertebrates, amphibians and reptiles, bird eggs and young, small mammals, and the young of larger mammals. Feeding activity by feral hogs turns over and uproots the forest floor, causing damage to seedlings, herbaceous and other sensitive plant communities, litter development, and soil structure. There are active efforts to control or eradicate feral hog populations in the study area.

Secondary Criteria: Diversity

The study area supports a diversity of habitats that illustrate the complex interplay between the river and its floodplains. These include linear or small-patch communities such as canebrakes, floodplain pools, riparian forests, and hardwood and pine-dominated hammocks. The bottomland hardwood forests are also anchored by a major river originating in the Piedmont—the Ocmulgee River.

Secondary Criteria: Rarity

The Bond Swamp National Wildlife Refuge Comprehensive Conservation Plan notes that wood storks (Mycteria americana) (federal – threatened) have been sighted occasionally in the refuge using the open wetland habitats for post-breeding foraging (USFWS 2009).
One federally listed plant, the relict trillium (*Trillium reliquum*), has been observed in bottomland hardwood forests in the study area, as well as one species proposed as threatened, the Ocmulgee skullcap (*Scutellaria ocmulgee*) (USFWS 2022a). At-risk plant species in the study area include Gulf sweet pitcher plant (*Sarracenia rubra* ssp. *Gulfensis*) (“at risk”) and Georgia bully (*Sideroxylon thornei*) (“at risk”) (USFWS 2021). The study area contains habitat that may be suitable for three other federally listed plant species: fringed campion (*Silene polypetala*) (endangered), Canby’s Dropwort (*Oxypolis canbyi*) (endangered), and Harperella (*Ptilimnium nodosum*) (endangered) (USFWS 2022b). The refuge, and by extension the study area, also contains habitat that may be suitable for state-listed plants such as the yellow flytrap (*Sarracenia flava*) (state unusual), ovate catchfly (*Silene ovata Pursh*) (state rare), sweet pitcher plant (*Sarracenia rubra*) (state threatened), and Indian olive (*Nestronia umbellula*) (state threatened) (USFWS 2009). The bald eagle (*Haliaeetus leucocephalus*) (state endangered) has been nesting in Bond Swamp National Wildlife Refuge for many years and can be found year round on the refuge and likely in surrounding areas.

Bottomland hardwood forests also provide habitat for the middle Georgia black bear population (*Ursus americanus*). This population of bears is genetically distinct and one of three populations of bears in Georgia. The core areas for this population include Oaky Woods and Ocmulgee Wildlife Management Areas and much of the surrounding private, industrial forest land (GA DNR 2019). Gray (2015 in GA DNR 2019) found that upland forests were the preferred overall habitat type; bear densities were greater in upland areas than bottomlands (Ashley 2016 in GA DNR 2019). Still, the bottomland hardwood forests of the Ocmulgee River corridor represent an important piece in connecting the middle Georgia black bear population to other bear populations in the state (GA DNR 2019). The central Georgia bear population is not contiguous with any other bear population and is almost surrounded by human development and fragmented agricultural land. Conservation or the creation of habitat linkages between disjunct tracts of forest can help provide corridors for bears moving in search of food, dens, and mates. Corridors can also aid juvenile dispersal and facilitate bear population expansion (Weaver 2000 in GA DNR 2019). In particular, the Altamaha River complex’s linkage with the Ocmulgee River creates the opportunity for future corridor extensions to the middle Georgia black bear population, which may help expand the genetic diversity of the currently fragmented bear populations (Kennedy 2014).

As noted above, the study area contains stands of giant cane, a critically endangered ecosystem that was once a dominant landscape feature in the southeastern United States. Noss et al. (1995) estimated canebrakes have been reduced to less than 2% of their former abundance. Cane restoration is extremely difficult because of slow growth of transplanted rhizomes and competition from weeds and vines (Platt and Bradley 1997), so protection of extant canebrakes is vital for the conservation of the species. Canebrakes at Bond Swamp are intensively used as breeding habitat by Swainson’s warbler (*Limnothlypis swainsonii*), itself a species of concern (Wright 2002). This bird species was identified as a high-priority species in the State Wildlife Action Plan for Georgia (GA DNR 2015).
Furthermore, the Ocmulgee River corridor has been identified by the Georgia Department of Natural Resources (DNR) as an important component in establishing “greenways” throughout the state. These greenways are large patches of natural habitat as well as other areas that could be conserved or restored to provide for greater habitat connectivity. In particular, habitat connectivity provides opportunities for movement, migration, and changes in distribution of plant and animal species. As habitat conditions change in the face of climate change and human land use, the connectivity between the Ocmulgee River corridor and other areas will enable it to provide high-quality habitat for rare, threatened, or endangered species into the future.

**Secondary Criteria: Value for Science and Education**

In the study area, land managers have completed resource inventories and monitoring on their respective lands; however, research projects conducted by nongovernmental agencies have been limited in number and primarily single-species focused (e.g., Wright 2002, Triplett et al. 2010). Still, because the study area is the site of some of the last remnant canebrakes in the Atlantic Coastal Plain, there is abundant potential for future research. Scientific study of vegetation in the study area is limited, but recent research suggests that the Ocmulgee River corridor can play a valuable role in understanding the *Arundinaria* genus. Triplett et al. (2010) used cane specimens from Macon-Bibb County, among others, to better understand genetic variation and natural hybridization among *A. gigantea*, *A. tecta*, and *A. appalachiana*. This study helped to clarify the relationships between these three different species and their geographical distributions.

Furthermore, cane (*Arundinaria* spp.) was an important plant resource for indigenous peoples living in the southeastern United States before European American settlement (Platt et al. 2009). Platt et al. (2009) summarize its uses:

*Cane was used to make houses and village structures, military and hunting weapons, fishing gear, furniture and domestic implements, personal adornments, baskets, musical instruments, and watercraft. Medicines were prepared from cane, and parts of the plant furnished food and fuel. Canebrakes provided agricultural land, livestock forage, and habitat for wild game.*

Thus, the study area provides ample opportunity for educating people about the importance of cane as both a natural and cultural resource.

**Conclusion**

The bottomland hardwood forest resources of the study area do not meet the criteria for national significance because they lack significant stands of old-growth bottomland hardwoods and have experienced a high level of disturbance by human activity—particularly logging and fire suppression.

Given the limited amount of research that has occurred, the bottomland hardwood forests within the study area would benefit from further study. As noted previously, the northern portion of the study area lacks bald cypress, which is unusual for undisturbed bottomland hardwood forests. If this condition were to be determined to be naturally occurring phenomenon, the study area could represent a new natural feature not already represented by the national park system and/or the NNL program.
Similarly, further research into the occurrence, extent, and density of giant cane and switch cane stands in the Ocmulgee River corridor and at Congaree National Park might also show whether aspects of the study area are unique among bottomland hardwood forests in the Atlantic Coastal Plain.

### Analysis of Blackland Prairies

#### Primary Criteria: Illustrative Character

The prairie sites within the study area represent the archetypical blackland prairie (also known as black belt prairie or Georgia Eocene chalk prairie). The area is maintained as prairie and contains intact blackland prairie fauna. Furthermore, an inventory of plants within the study area supported the designation of a new ecological association, the Georgia Eocene chalk prairie (Echols and Zomlefer 2010).

Blackland prairies are a unique habitat type that occur infrequently in Georgia and are considered globally rare (Echols, Pyne, and Govus 2008). Similar communities exist more widely to the west of Georgia; however, only a handful of these communities are found in Georgia, mostly within Oaky Woods Wildlife Management Area (GA DNR 2014). Characteristics of a blackland prairie ecosystem include (1) a distinctive suite of herbaceous prairie vegetation not found elsewhere in the state; (2) chalky, clay-rich soils, derived from marl, chalk, or limestone, which shrink and crack when dry and expand when wet; (3) high ground-layer plant species diversity; (4) small open grasslands surrounded by hardwood and pine forests; and (5) limited woody cover. All of the blackland prairie conditions described above are present at Oaky Woods Wildlife Management Area (Echols 2007).

Echols (2010) conducted a floristic inventory on 109 acres across six remnant blackland prairie sites within Oaky Woods Wildlife Management Area. These sites range from 5 to 31 acres in area. The 109-acre complex yielded 351 taxa in 219 genera and 89 families, including 314 native species (table 4). The families that dominated in species richness were Poaceae (53 spp., 15.1%) and Asteraceae (49 spp., 13.9%). Echols (2010) documented five open prairie community types: *Houstonia nigricans-Sporobolus vaginiflorus, Sporobolus clandestinus-Aristida purpurascens, Muhlenbergia capillaris, Sorghastrum nutans-Ratibida pinnata-Houstonia nigricans*, and *Andropogon geradii-Sorghastrum nutans*. 

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**Fringed champion (Silene polypetala)**

*Photo credit: Peter Pattavina USFWS*
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<tr>
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<th>Common Name</th>
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<td>Lyre-leaved Sage</td>
</tr>
<tr>
<td>Solidago nemoralis</td>
<td>Old Field Goldenrod</td>
</tr>
<tr>
<td>Sorghastrum nutans</td>
<td>Indian Grass</td>
</tr>
<tr>
<td>Sporobolus clandestinus</td>
<td>Rough Dropseed</td>
</tr>
<tr>
<td>Sporobolus vaginiflorus</td>
<td>Poverty Dropseed</td>
</tr>
<tr>
<td>Symphyotrichum novae-angliae</td>
<td>New England Aster</td>
</tr>
<tr>
<td>Thaspium chapmanii</td>
<td>Meadow-parsnip</td>
</tr>
<tr>
<td>Ulmus alata</td>
<td>Winged Elm</td>
</tr>
<tr>
<td>Ulmus rubra</td>
<td>Slippery Elm</td>
</tr>
<tr>
<td>Viburnum rufidulum</td>
<td>Southern Black Haw</td>
</tr>
</tbody>
</table>
No documentation exists of fauna that are directly associated with blackland prairies within the study area. However, the Oaky Woods Management Plan notes that animals of conservation concern that could benefit from these habitats include the Henslow’s sparrow (*Ammodramus henslowii*), Loggerhead Shrike (*Lanius ludovicianus*), and Northern Bobwhite (*Colinus virginianus*) (GA DNR 2014). Furthermore, increasing the amount of prairie habitat would benefit deer, quail, doves, cottontails, and woodcock (GA DNR 2014).

Georgia is the only state in the Atlantic Coastal Plain where blackland prairies have been documented (Echols, Pyne, and Govus 2008). Small remnants of blackland prairie can still be found outside the study area; however, there are few “good quality” remnants remaining (GA DNR 2020b). The majority of blackland prairie has been converted to agriculture or pasture, lost to development, or become degraded through encroachment by woody plants. Two blackland prairie sites are located in Perry, Georgia, on conservation easements held by Oconee River Land Trust, and one additional blackland prairie site is found on private property in Jeffersonville, Georgia. The portion of the study area assessed by Echols (2007) is more intact and functional than blackland prairies elsewhere in the Atlantic Coastal Plain, a fact demonstrated by the greater number of blackland prairie species within the study area than at other, similar sites (ORLT 2017a, 2017b; GA DNR 2021a). This is likely related to the larger acreage of blackland prairie in the study area, both at individual prairie sites as well as in total. This greater area reduces edge effects on the prairie sites, which helps limit changes in population or community structures. In addition, the area is actively being maintained as open prairie by the Georgia Department of Natural Resources.

### Primary Criteria: Present Condition

Echols (2010) conducted a floristic inventory on 109 acres across six remnant blackland prairie sites within Oaky Woods Wildlife Management Area (Oaky Woods). The Georgia Department of Natural Resources identified approximately 117 acres of prairie habitat on Oaky Woods before purchasing it; further searches using soil maps increased the prairie habitat acreage on Oaky Woods from 117 acres to 334 acres (GA DNR 2014). However, most of this additional acreage is in poor condition and in need of restoration (GA DNR 2014). Blackland prairie sites within the study area have been impacted by human activity historically, including road-building, logging activities, herbicide application, introduction of invasive species, and decades of fire suppression (GA DNR 2014). Still, the study area demonstrates all the characteristics of a blackland prairie ecosystem as described above. The study area has a greater area of blackland prairie and a greater number of blackland prairie species than any other blackland prairie site in the Atlantic Coastal Plain. Additionally, the Georgia Department of Natural Resources has conducted several prescribed burns in prairie sites at Oaky Woods, which has increased the cover of native grasses and reduced encroachment from woody plants.

### Secondary Criteria: Diversity

The blackland prairie sites at Oaky Woods support a diversity of habitats that illustrate the interplay between geology, topography, and ecology (see the “Other Biological Features” section). In addition to the prairie communities, Echols (2007) identified seven other community types within the blackland prairie sites of Oaky Woods. These include:
• *Juniperus virginiana/Fraxinus americana/Ratibida pinnata-Agalinis tenuifolia* – a calcareous woodland community, resembling the Prairie Cedar Woodland in Mississippi, that occurs on a ridgeline chalk outcrop and the adjacent side slope

• *Quercus muehlenbergii/Cercis canadensis-Quercus sinuata/Viburnum rufidulum/Scleria oligantha* – a calcareous woodland community, resembling the Upper West Gulf Dry Chalk Savanna in Arkansas, that is restricted to the Sumter soil series on shoulder slopes

• *Fraxinus americana-Quercus muehlenbergii/ Crataegus sp. Cercis canadensis* – a shrub-dominated community found on Sumter soils on gentle shoulder slopes

• *Crataegus spathulata-Cercis canadensis- Celtis tenuifolia* - dense shrub thickets in linear transition zones bordering open prairie communities and occurs at every site

• *Pinus taeda-Quercus velutina-Quercus coccinea- Acer floridanum-Quercus muehlenbergii/Cercis canadensis-Ptelea trifoliata* – a dry-mesic pine-hardwood forest type that occurs over sandy clay loams on side slopes

• *Quercus shumardii-Quercus nigra-Ulmus rubra/Acer floridanum-Fraxinus americana/Ulmus alata-Asimina triloba/Vitis rotundifolia* – a mesic forest that occurs over deep, dark, silty clay soils along back slopes and lower slopes

• *Quercus nigra-Quercus pagoda/Acer floridanum/Cercis canadensis* – a mesic forest limited to sandy loams along ephemeral stream bottoms

**Secondary Criteria: Rarity**

Twenty-three rare plant species are found in the blackland prairie at Oaky Woods Wildlife Management Area, including one federally endangered/state endangered species (*Silene polypetala*) and one state threatened species (*Symphyotrichum georgianum*). Other rare plant species include 16 special concern species (rare or imperiled in Georgia) and 5 Georgia watch list species. Four of these species are state records, meaning they had not been previously found in Georgia: (*Cyperus acuminatus, Draba cuneifolia, Galium virgatum, and Scutellaria drummondi*).

**Secondary Criteria: Value for Science and Education**

Because the study area contains some of the last remaining blackland prairie sites in the Atlantic Coastal Plain (Echols 2007; GA DNR 2014, 2020b), there is abundant potential for research. Echols’ floristic inventory on the blackland prairie sites in Oaky Woods Wildlife Management Area was instrumental in establishing blackland prairies in Georgia as a new ecological association, the Georgia Eocene chalk prairie, that is different from blackland prairies in Mississippi and Alabama. Additionally, the blackland prairie sites in the study area are open to the public, providing opportunities for the public to visit, observe, and connect to the blackland prairie ecosystem.

**Conclusion**

The blackland prairies within the study area meet the criteria for national significance, representing an outstanding example of the blackland prairie ecosystem in the Atlantic Coastal Plain.
The blackland prairies of the study area have been less disturbed by human activities than other prairies in Atlantic Coastal Plain, contain high-quality examples of other natural features, provide habitat for rare and endangered species, and hold valuable scientific and educational opportunities.

### Analysis of the Habitat Corridor Resource

#### Primary Criteria: Illustrative Character

Habitat corridors are found all over the world, and the size, shape, and quality of a corridor depend on the needs and characteristics of the species that use them and the landscapes in which they occur (NPS 2017). Habitat corridors can serve one or more ecological functions, including providing for

- dispersal and genetic exchange between populations
- range shifting, range expansion, or range restoration, such as in response to climate change
- seasonal movement or migration
- succession, movement, or recolonization following a disturbance or population decline (Wildlife Corridors Conservation Act of 2019, S. 1499, 116th Congress, 2019)

Although there are numerous forested riverine corridors in the southeast Coastal Plain, the Ocmulgee River corridor within the study area (figure 1) is noteworthy in that a disjunct population of black bears, together with other wildlife, has been documented using the corridor for dispersal and seasonal movement (GA DNR 2021b). The south Georgia black bear population is found mostly in and around the Okefenokee Swamp, while the north Georgia bear population inhabits the southern Appalachians (GA DNR 2019).

The study area is particularly important to the central Georgia black bear population both because it provides core habitat and because it facilitates the seasonal and dispersal movements of black bears. The study area contains a linear corridor connecting two larger blocks of higher quality habitat—Bond Swamp National Wildlife Refuge in the north and Georgia Department of Natural Resources-owned lands south of Robins Air Force Base. The area in between is primarily privately owned land, much of which is managed as commercial timberland. The habitat corridor provides a wide variety of habitat types that provide food sources, shelter, and/or denning sites at different times of the year, including hardwood forests, cypress-tupelo swamps, clear-cuts, pine plantations, and agricultural areas. Furthermore, the corridor has relatively limited development and extremely few linear barriers to travel, enabling seasonal or one-time movements by black bears and other species.

Cook (2007) studied the home range distribution and movement of black bears trapped and collared within the state wildlife management areas. Home ranges for black bears were generally distributed along the forested Ocmulgee River and tributaries (Cook 2007).
American black bear cubs (Ursus americanus)

While female black bears had annual home ranges and core areas that almost entirely overlapped with the wildlife management areas, the core areas for male bears lay primarily outside the wildlife management areas (Cook 2007). Furthermore, the male bears traveled widely; the mean annual home range for adult male black bears was 195.3 km², with some bears ranging over 500 km² (Cook 2007). Male black bears frequently shifted their center of activity (Cook 2007), generally shifting between available food sources, areas with potential mates, and denning sites. Some bears even make regular seasonal movements through the corridor. According to Georgia DNR wildlife biologists, in August approximately half of the male black bears move from habitat north of Highway 96 southward to Blakely and Pulaski Counties; then from January to March they make their way back north (GA DNR 2021b).

The Ocmulgee River corridor also provides a pathway for dispersal of central Georgia black bears into new habitats and potentially other bear populations.

Black bears in Georgia are fragmented into northern, central, and southern populations, and studies have found that these divided populations have a lack of genetic exchange between one another (Hooker et al. 2019). Although bears are capable of long-distance movements, their dispersals are limited by their relatively low numbers, slow reproductive rates, and propensity to create conflicts while moving through urban areas (Hooker 2017 in GA DNR 2019). Still, black bears from the central Georgia black bear population have been observed as far north as Monroe, Jones, Jasper, and Putnam Counties and as far south as Crisp County (GA DNR 2021b). While most of the dispersing black bears have been young adult males, one female black bear with a cub was caught in Jasper County; a genetic test showed that both parents of the bear were from the central Georgia bear population. Kennedy (2014) noted that the Altamaha River’s linkage with the Ocmulgee River could create the opportunity for corridor extensions from the southern Georgia black bear population to the central black bear population. However, Hooker et al. (2021) simulated bear movement paths from the northern and southern Georgia black bear populations and determined that the potential for immigration into the central Georgia black bear population was extremely low, even with the creation of a hypothetical 1-km-wide corridor between the southern Georgia bear population and the central Georgia bear population. While individual bears are occasionally spotted along the Altamaha River (GA DNR 2021b), the Altamaha River corridor, which connects directly to the Ocmulgee River corridor, does not currently serve as primary or secondary occupied range by the southern Georgia black bear population (Kennedy 2014). Hooker (2021) noted that the establishment of “stepping stone populations” may be needed to increase the likelihood of demographic and genetic exchange between the two populations.
In addition to providing for seasonal movements of black bears and other wildlife, the Ocmulgee River corridor also enhances the resilience of biological communities by providing for opportunities for succession, movement, or recolonization following a disturbance (such as an extreme flooding event or a fire) or population decline. Similar plant and animal populations are found throughout the corridor and can therefore serve as sources of emigrants into areas where a disturbance has occurred. While there has not been documentation to show this occurring in the Ocmulgee River corridor, Beier and Noss (1998) noted that any habitat configuration that promotes immigration among patches will enhance population viability and the likelihood of recolonization. As the study area is relatively unfragmented, there are few impediments to the movement or migration of individual plants and animals into new areas.

Primary Criteria: Present Condition

The Ocmulgee River corridor has been identified by the Georgia Wildlife Division as an important component of a network of potential “greenways” throughout the state (GA DNR 2015). For an area to be identified as a potential habitat corridor, it needs to be relatively unfragmented, with limited development. Similar to other forested riverine corridors in the Atlantic Coastal Plain, the Ocmulgee River corridor contains a mixture of publicly and privately owned lands. As such, the biological communities are in variable condition. The floodplain of the Ocmulgee River near Macon has been subjected to increased demands from nearby human populations. Portions of the bottomland forests below Macon have been extensively harvested for timber and portions have been cleared for agricultural purposes.

In addition, much of the privately owned upland in the river corridor is managed for timber (GA DNR 2020a), with many of the natural vegetation communities in these areas having been replaced by pine plantations. Clear-cutting, tree thinning, and prescribed burning of the understory are common forestry practices in upland areas devoted to timber production. Still, commercial timber stands are frequently used by black bears as a route of travel even if they do not offer a significant amount of food sources (due to their dense canopy cover and/or lack of hard-mast-producing species). These corridor lands are attractive because they generally are devoid of humans, busy roadways, and other potential threats (Kennedy 2014).

The habitat corridor within the study area has been relatively unimpacted by human-created linear barriers compared to other areas in Georgia. Linear structures such as highways, fences, and utility lines can impede corridor utility if they cross a corridor and are not mitigated. These linear features impede movement of animals and movement of plants that depend on animals for transport. Within the study area, there are few linear barriers that prevent the movement of animals and plants in a north-south direction, with the exception of State Road (SR) 96. A study contracted by the Georgia Department of Transportation found that the home ranges and movements of radio-collared black bears were clearly defined by SR 96, with the home ranges of several instrumented bears actually truncated by the highway right of way (Hooker et al. 2016). Several bears did cross SR 96; however, the more times they crossed the road the more likely they were to be hit by a car. Between 2003 and 2010, the section of SR 96 within or near the study area had the second-largest number of vehicle-bear collisions in central Georgia, second only to the section of US 23 just south of Tarversville (Duncan 2010).
Nevertheless, Hooker et al. (2016) noted that SR 96 prior to widening was unlikely to be a substantial barrier to gene flow within the central Georgia black bear population.

As part of the plans to widen SR 96 into a four-lane divided highway, the Georgia Department of Transportation intends to install underpasses to reduce wildlife-vehicle collisions while allowing wildlife movement across the highway corridor. These actions are intended to mitigate the effects of widening the road and increase connectivity across it.

**Secondary Criteria: Diversity**

The study area contains a diversity of habitat types that contribute to its function as a habitat corridor. Predominant forest types are bottomland hardwood forests within the Ocmulgee River floodplain and planted pine (*Pinus* spp.), natural pine, and mixed pine-hardwood in the uplands. Common overstory tree species include loblolly pine, red and white oaks, sweetgum, red maple, American beech, yellow poplar, water tupelo, and bald cypress. Within the bottomland hardwood forests are linear or small-patch communities such as canebrakes, floodplain pools, riparian forests, and hardwood and pine-dominated hammocks. Furthermore, many parts of the floodplain in the study area remain inundated throughout the year due to beaver swamps and oxbow-type lakes. Beaver ponds, and the marshes that develop around their edges, provide habitat diversity in a region of the state where ponds and lakes do not otherwise occur naturally.

**Secondary Criteria: Rarity**

One federally listed plant, the relict trillium, has been observed in bottomland hardwood forests in the study area, as well as one species proposed as threatened, the Ocmulgee skullcap (*Scutellaria ocmulgee*) (USFWS 2022a).

At-risk plant species in the study area include Gulf sweet pitcher plant (“at risk”) and Georgia bully (“at risk”) (USFWS 2021). The study area contains habitat that may be suitable for three other federally listed plant species: fringed campion (*Silene polypetala*) (endangered), Canby’s Dropwort (*Oxypolis canbyi*) (endangered), and Harperella (*Ptilimnium nodosum*) (endangered) (USFWS 2022b). The refuge, and by extension the study area, also contains habitat that may be suitable for state-listed plants such as the yellow flytrap (state unusual), ovate catchfly (state rare), sweet pitcher plant (state threatened), and Indian olive (*Nestronia umbellula*) (state threatened), as well as leechbrush (*Nestronia umbellule*) (state threatened), which has been found on an upland site adjacent to rock outcroppings.
Figure 3. Study Area Boundary as Defined by the Wildlife Habitat Corridor and the Associated Cultural Landscape of the Ocmulgee River Corridor Cultural and Archeological District. Demarcated by Relatively Unfragmented Lands, with Any Existing Development a Minor Impediment to Wildlife Movements.
The bald eagle (*Haliaeetus leucocephalus*) (state endangered) has been nesting in Bond Swamp National Wildlife Refuge for many years and can be found year-round on the refuge and likely in surrounding areas. The *Bond Swamp National Wildlife Refuge Comprehensive Conservation Plan* also notes that there have been occasional sightings of wood stork (federal – threatened) in the refuge using the open wetland habitats for post-breeding foraging (USFWS 2009).

**Secondary Criteria: Value for Science and Education**

The study area has supported scientific research into ecological connectivity, as evidenced by scientific publications and ongoing research. For example, there have been numerous research projects studying black bear movements, habitat use, and genetics in the area. Recent research suggests that the Ocmulgee River corridor can play a valuable role in understanding the effects of changes to linear human-created structures on wildlife movement. The Georgia Department of Transportation recently completed a study regarding the efficiency of road underpasses for minimizing bear vehicle collisions on SR 96. As the department plans to both widen the road and install wildlife underpasses, future research could assess whether bears begin using the planned highway underpasses or if the widened road presents an even greater deterrent to bear movements. Similarly, research could determine if the widened highway represents a barrier to gene flow within the central Georgia black bear population.

The study area also provides superlative opportunities for education and interpretation about habitat corridors and ecological connectivity.

Habitat corridors are underrepresented in the national park system (NPS 2017), and the Ocmulgee River corridor represents a valuable educational tool on the importance of habitat corridors for facilitating the movement of species between areas of core habitat, between populations, or in response to climate change.

**Conclusion**

The habitat corridor is at least regionally significant, as the Ocmulgee River corridor provides habitat connectivity for numerous species, including one of the three black bear populations in the state of Georgia. The habitat corridor represents an example of a functioning wildlife corridor where black bears and other wildlife make seasonal movements and disperse to find new territories. The corridor also represents a resource that holds valuable scientific and educational opportunities and is underrepresented in the national park system. The quality and functioning of the corridor (e.g., the relative absence of linear barriers and the potential for enhancing/restoring large blocks of unfragmented habitat) suggests that it might be nationally significant.

However, the Ocmulgee River corridor is one of numerous corridors identified in the Atlantic Coastal Plain by the Southeast Conservation Adaptation Strategy, the Wildlands Network, and other entities interested in preserving ecological connectivity (SCB 2020; Wildlands Network 2019). A lack of data currently exists for whether there are comparative examples of functioning wildlife corridors in the Atlantic Coastal Plain, and therefore national significance of the study area cannot be determined at this time. Nevertheless, the habitat corridor contributes to the study area’s overall significance and will be considered in the suitability analysis (figure 3).
Natural Resources That Need Further Study

Ocmulgee River

Study Area Site Description

The Ocmulgee River is a sixth-order river that begins within the crystalline rocks of the Southern Piedmont and flows across the Coastal Plain province of less resistant, gently dipping sediments before joining the Oconee River to form the Altamaha River. There are no dams on the Ocmulgee River or the Altamaha River below the Juliette dam, resulting in the longest free-flowing river system on the East Coast. The section of the Ocmulgee River within the study area falls entirely within the Atlantic Coastal Plain province.

Within the Bond Swamp National Wildlife Refuge, the dynamic nature of the flooding regimes along the waterways and adjacent floodplains supports a diversity of warmwater fish species (approximately 100), including largemouth bass (Micropterus salmoides), spotted bass (M. punctatus), crappie (Pomoxis spp.), bluegill (Lepomis macrochirus), and white catfish (Ictalurus catus).

Due to the lack of significant downstream obstructions, several anadromous species also occur in the Ocmulgee system, including striped bass (Morone saxatilis), American eel (Anguilla rostrata), and the federally endangered Atlantic sturgeon (Acipenser oxyrinchus). Several species of freshwater mussels and many other species of fish are possible on the refuge.

The Ocmulgee River was included in the US Environmental Protection Agency’s 2008–2009 National Rivers and Streams Assessment (USEPA 2016). One location on the Ocmulgee River within the study area was sampled as part of the assessment. At each site, field crews assessed biological quality, chemical stressors, physical habitat stressors, and human health indicators. At the assessment site, 89 fish were collected, representing 17 different fish species: eastern silvery minnow, channel catfish, gizzard shad, common carp, robust redhorse, striped mullet, largemouth bass, redbreast sunfish, spotted sunfish, bannerfin shiner, spotted sucker, dollar sunfish, Ocmulgee shiner, bluegill, redeye bass, Atlantic needlefish, and redbar sunfish. When assessed against the fish multimetric index developed for the Plains and Lowlands region, the Ocmulgee River’s fish assemblage was rated as being in “good” condition.
Bed sediment condition, in-stream cover condition, and riparian vegetation condition were all rated as good, while riparian disturbance condition was rated as low.

In the Southeast Conservation Blueprint (2020), much of the mainstem of the Ocmulgee River in the study is scored high on the riparian buffer indicator, which measures the amount of natural habitat surrounding rivers and streams. The mainstem of the Ocmulgee River also scored highly on network complexity, which depicts the number of different stream size classes in a river network not separated by large dams (SCB 2020).

A Georgia state-listed endangered fish that occurs in the Ocmulgee River is the robust redhorse sucker (*Moxostoma robustum*). This fish lives in Georgia rivers and was once thought to have disappeared from the Ocmulgee River entirely. However, it was rediscovered in the river near Bond Swamp National Wildlife Refuge in 1999. The only juvenile robust redhorse ever collected in the Altamaha Basin was from the lower section of the study area, indicating that the lower reach of the Ocmulgee River may be important rearing habitat for this species (GA DNR 2021c). The state-threatened Altamaha shiner (*Cyprinella xambara*), the state rare goldstripe darter (*Etheostoma parvipinne*), and the spotted turtle (*Clemys guttata*) are listed as occurring in Bibb and Twiggs Counties, but it is unknown whether these are found within the study area (GA DNR 2020c). The Altamaha spiny mussel (*Elliptio spinosa*) is a federal candidate that has potential to be found within the study area. The Altamaha arc mussel (*Alasmidonta arcula*) is listed as threatened by the State of Georgia and is also likely to be found in the area assuming appropriate habitat exists (USFWS 2007). The federally endangered shortnose sturgeon (*Acipenser brevisrostrum*) and Atlantic sturgeon (*Acipenser oxyrinchus*) are known to occur in the Ocmulgee system.

Ingram and Peterson (2016) observed Atlantic sturgeon entering the Altamaha River system in later summer and migrating upward to suspected spawning habitats in the Ocmulgee and Oconee tributaries. While spawning habitat has not yet been identified in the Altamaha River system, Atlantic sturgeon have been observed in the Ocmulgee River from the confluence with the Oconee River to as far north as the Juliette dam (UGA 2020). Hardbottom habitat with rocky shoals, rocky bottom, or coarse sand is important spawning habitat for Atlantic sturgeon.

**Discussion**

At this time, information available does not sufficiently demonstrate that the Ocmulgee River meets the criteria for national significance. In particular, there is not sufficient evidence that the Ocmulgee River within the study area is unusually illustrative of a river ecosystem, nor that the Ocmulgee River is unusually illustrative of a river system landform. The Ocmulgee River within the study area does contain rare and endangered species, such as the federally endangered Atlantic sturgeon and Georgia state-listed endangered robust redhorse sucker, but all of these species can be found in the Savannah River system and other drainages. Compared to adjacent river systems, the Ogeechee-Altamaha drainage system (of which the Ocmulgee River is one part) was documented as having a lower number of native fish species (Marcy et al. 2005). In addition, the current condition of biological resources within the river is not well known. The *2008–2009 National Rivers and Streams Assessment* only assessed site conditions at one location on the river within the study area, and that assessment was completed over 12 years ago. As the current information is inconclusive, the Ocmulgee River within the study area would benefit from further study.
Freshwater biodiversity hotspots were identified in the NPS system plan as being underrepresented within the national park system (NPS 2017), and additional research may provide new insights into the significance of the Ocmulgee River as an aquatic ecosystem. In addition, the Ocmulgee River from Macon to the confluence with the Altamaha River is listed in the Nationwide Rivers Inventory, section 5(d) of the Wild and Scenic Rivers Act. All rivers in the Nationwide Rivers Inventory should be studied to determine whether they should be included in the national wild and scenic rivers system. The Nationwide Rivers Inventory (NRI) is a listing of free-flowing river segments that are believed to possess one or more "outstandingly remarkable" natural or cultural values judged to be at least regionally significant. Hence, NRI river segments are potential candidates for inclusion in the national wild and scenic river system.

Upland Forests

Study Area Site Description

The Bond Swamp conservation plan indicates that upland forests within the study area and the refuge can be broadly classified as oak–hickory–pine (USFWS 2009). Chief overstory species include hickories; sweetgum; white oak (Q. alba); persimmon (Diospyros virginiana); tulip poplar (Liriodendron tulipifera); and loblolly, shortleaf, and longleaf pines (Pinus taeda, P. echinata, and P. palustris). Mixed forest types on the refuge are typically hardwood dominated. The fire-tolerant/dependent pines now comprise only a minor component of upland stands, presumably due to the exclusion and suppression of fire, and resultant hardwood encroachment. Hardwoods can shade and suppress existing pine trees and preclude the establishment of future pine cohorts through shading and competition for space and nutrients.

Advance regeneration of softwood species appears to be lacking in much of the uplands at Bond Swamp National Wildlife Refuge. A mixture of understory species includes dogwood, red bud (Cercis canadensis), and greenbrier (USFWS 2009).

At Robins Air Force Base, upland forest occurs primarily in the southeastern portion of the base. The current upland pine forests are dominated by longleaf pine and loblolly pine, while upland hardwood forests are characterized by dominants including various species of oaks, southern magnolia (Magnolia grandiflora), American beech (Fagus grandiflora), sweetgum, and loblolly pine (USAF 2017). Other trees present include sweetgum, flowering dogwood (Cornus florida), elm, redcedar (Juniperus virginia), southern red oak (Quercus falcata), and hickories (USAF 2017).

Ocmulgee and Oaky Woods Wildlife Management Areas contain several thousand acres of pines, almost all of which are less than 50 years old and the majority of which are loblolly pine (GA DNR 2010, 2014). Ocmulgee Wildlife Management Area also contains some slash, sand, and longleaf pine stands, as well as upland hardwoods and mixed pine-hardwood forest (GA DNR 2010). Many of the upland forests in the study area outside of the refuge and state wildlife management areas are managed as pine plantations, where clearcutting, tree thinning, and prescribed burning of the understory are common forestry practices.

Resident and associated fauna are similar to those described above in the “Analysis of Bottomland Hardwood Forests” section.
Discussion

At this time, the information available does not sufficiently demonstrate that the upland forests within the study area meet the criteria for national significance. In particular, there is not adequate evidence that these forests are unusually illustrative of oak/pine forests or that they have been less disturbed by humans than other areas. While there is a general understanding of the species present, there is insufficient data regarding many forest characteristics, including relative species abundance; age class structure; homogeneity or patchiness of species distribution across the study area; and structure and composition of the canopy, understory, subcanopy, shrub and seedling layer, and ground layer. As the current information is inconclusive, the upland forests within the study area would benefit from further research. These forests are a key component of the Ocmulgee River corridor’s value in providing habitat connectivity, and additional research may provide new insights into the significance of the upland forests within the study area.

CONCLUSION: SUMMARY OF NATIONAL SIGNIFICANCE EVALUATION FOR NATURAL RESOURCES

The National Park Service has assessed the characteristic natural resources of the Ocmulgee River corridor between Macon and Hawkinsville, Georgia (see figure 1 above) to determine whether these resources meet the National Park Service’s criteria for national significance. The assessed resources are as follows:

- the bottomland hardwood ecosystem,
- the blackland prairie ecosystem,
- the habitat corridor resource,
- the Ocmulgee River, and
- associated upland forests.

For the reasons set forth above, the National Park Service concludes that only a very small portion of the study area, specifically, the blackland prairie ecosystem, is nationally significant for natural resources. Other component resources are either not nationally significant (the bottomland hardwood ecosystem), have been insufficiently studied by others for the National Park Service to make a determination (the Ocmulgee River itself and associated upland forests), or are likely of regional rather than national significance (the habitat corridor resource). However, the quality and functioning of the habitat corridor suggests that it could be nationally significant. There is currently a lack of data for whether there are comparative examples of functioning wildlife corridors in the Atlantic Coastal Plain. In addition, aspects of the habitat corridor that contribute to its natural function also correlate to the cultural significance of the river corridor study area. Because the National Park Service has determined that the cultural resources of the study area are nationally significant, and because the study area’s natural resources are inextricably bound to the area’s cultural significance, natural resources will be carried forward to the suitability phase of the Ocmulgee River Corridor Special Resource Study. The habitat corridor itself (see figure 3), which is inclusive of cultural sites of national significance and the discrete blackland prairie ecosystems, will serve to bound the study area through the rest of the special resource study process.
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Chapter 4: Suitability

CRITERIA FOR ESTABLISHING SUITABILITY

To qualify as a potential addition to the national park system, an area that is nationally significant must also meet the criterion for suitability. National Park Service Management Policies 2006, section 1.3.2, states that “an area is considered suitable for addition to the national park system if it represents a natural or cultural resources type that is not already adequately represented in the national park system or is not comparably represented and protected for public enjoyment by other federal agencies, tribal, state, or local governments, or the private sector.” Adequacy of representation is determined on a case-by-case basis through the comparison of the proposed area to other similar resources within the national park system or other protected areas. The comparison should determine whether the study area would expand, enhance, or duplicate resources or visitor use opportunities found in other areas.

TYPE OF RESOURCES REPRESENTED BY THE STUDY AREA

The nationally significant cultural resources under consideration within the Ocmulgee River corridor are the archeological sites associated with the development of professional archeology in the United States through the New Deal archeological programs of the 1930s and 1940s. Though the New Deal archeological investigations occurred elsewhere in the United States at this time, the excavations at the Macon Plateau and Lamar sites, which later became the basis for Ocmulgee Mounds National Historical Park, changed the field of archeology into a formal, scientific profession and elevated the importance of archeology and cultural resource management in general to the American public. The New Deal archeological excavations at Ocmulgee Mounds National Historical Park and elsewhere within the Ocmulgee River corridor were the largest in American history, with an estimated 2.4 million artifacts recovered. The excavations additionally represent the full extent of New Deal-era archeology, as the excavations used the labor of people enrolled in several different federal programs over a nine-year period (1933–1942).
There are additional layers of locally or regionally significant cultural landscapes, traditional cultural properties, and ethnographic resources related to the long history of human presence within the river corridor. These local and regionally significant resources are associated with the topic of Creek heritage. Ancestral Creek people were a focus of research during the New Deal excavations, and New Deal archeological work disturbed important ancestral sites. Descendant Creek people retain cultural and historic ties with the Ocmulgee River corridor and their ancestors. Working through the Native American Graves and Repatriation Act, these descendant peoples continue to engage with the federal government and federally funded institutions to reclaim their ancestors and objects of cultural patrimony that were removed during the New Deal excavations.

Culturally, ancestral Creek people settled in the Ocmulgee River corridor due to the abundance of resources within this connected habitat corridor, and descendant Creek people retain ethnographic connections with the landscape and the natural communities on that landscape.

**THEME OR CONTEXT IN WHICH THE STUDY AREA FITS**

Under the revisions of the National Park Service’s thematic framework (1996), the Ocmulgee River corridor is associated with the following cultural resource theme and theme topics.

**Cultural Resource Theme/Theme Topics**

- **Peopling Places**
  - Migration from outside and within
  - Community and neighborhood
  - Ethnic homelands
  - Encounters, conflicts, and colonization

- **Expressing Cultural Values**
  - Educational and intellectual currents
  - Popular and traditional culture

- **Shaping the Political Landscape**
  - Parties, protests, and movements
  - Governmental institutions
  - Political ideas, cultures, and theories

- **Developing the American Economy**
  - Extraction and production
  - Workers and work culture
  - Governmental policies and practices
• Expanding Science and Technology
  - Experimentation and invention
  - Technological applications
  - Scientific thought and theory

Under the publication, *Natural History in the National Park System and on the National Registry of Natural Landmarks* (NPS 1990), the study area is associated with the following natural resource themes and subthemes.

**Natural Resource Theme/Subthemes**

- Eastern Deciduous Forest
  - Southern mixed forest
- Grassland
  - Eastern grassland
- River Systems and Lakes
  - Valley streams and rivers

In recent years, the National Park Service has worked to identify gaps in the cultural resources and values that are protected within the national park system. While the National Park Service cannot be expected to protect all important resources, it should strive to address missing stories and resources and work with other organizations towards a more fully representative system.

The 2017 NPS system plan, *One Hundred Years* (2017), identifies gaps and missing links in the system and offers recommendations for how the National Park Service can better reflect a full representation of ecological regions, cultural themes, and stories of diverse communities that are not currently protected or interpreted. The system plan identifies the broad topic of habitat corridors as being underrepresented in the national park system. It points to other relevant topics as well, such as gaps in Native American, Alaska Natives, and Pacific Islanders history; science, technology, engineering, and math; and history of land conservation and environmental awareness.

The Ocmulgee River corridor fits these additional themes as a site that could support and enhance in telling these diverse stories of American history.

**EVALUATION OF SUITABILITY**

A comparative analysis is needed to determine if duplicate resource protection and visitor opportunities are already offered in national park system units or other land management entities. Protected sites that contain a similar combination of resource values as that of the study are—namely, large intact natural landscapes with archeological and ethnographic resources that emphasize interconnectedness of the natural and cultural landscapes—could include resources similar to those found in the Ocmulgee River corridor. Within the national park system, Ocmulgee Mounds National Historical Park (Georgia), Congaree National Park (South Carolina), Everglades National Park (Florida), and Timucuan Ecological and Historical Preserve (Florida) embody a similar combination of themes identified for the Ocmulgee River corridor. Outside the national park system, the Savannah River corridor (Georgia), the Mobile-Tensaw Delta (Alabama), and Wateree River corridor (South Carolina) were considered for comparison.

**Similar Resources in the National Park System**

**Ocmulgee Mounds National Historical Park**

This unit of the national park system was established to preserve, protect, study, and commemorate the site of more than 12,000 years of continuous human habitation by multiple cultures and peoples and to study and interpret the interconnectedness of those cultures to the landscape of the Ocmulgee Old Fields.
The site’s Mississippian period earth mounds are the most visible features of occupation, built by the early Mississippian people who lived here from about AD 900 CE to AD 1100. However, groups from all known periods of human occupation have lived here, including Paleo-Indian, Archaic, Woodland, Lamar, and historic Creek people. According to Muscogee (Creek) tradition, the monument, and the wider “Ocmulgee Old Fields” area as a whole, is where their ancestors “first sat down” to farm the floodplain terraces along the Ocmulgee River. In the 1930s, the Ocmulgee Old Fields became the site of the largest archeological excavation ever to have occurred in the eastern United States. The information recovered from projects completed between 1933 and 1942 established a standard ceramic and cultural typology in the region and led to the eventual creation of the NPS Southeast Archeological Center. The New Deal archeology brought not only much-needed jobs to middle Georgia, but national attention as well. Strong local support bolstered by the federally funded excavations resulted in the establishment of Ocmulgee National Monument on December 23, 1936. The park works to provide a diverse visiting public with access to and understanding of the lands, resources, and associated stories.

The park is mostly bottomland forest and swamp in the floodplain of the Ocmulgee River, with some upland forest in the terraces above the floodplain. There are five general plant communities that sometimes intergrade: upland hardwood forest; upland mixed hardwood-pine forest; floodplain forest/swamp; open wetlandmarsh; and disturbed (ruderal) areas (Burkholder et al. 2017). White-tailed deer are the only large indigenous mammal that have been observed in Ocmulgee Mounds National Historical Park, although black bears are probably present at least on a transient basis.

While the Ocmulgee River corridor would protect many resources that are thematically similar to those already protected by Ocmulgee Mounds National Historical Park, the corridor would also expand and enhance the cultural and ethnographic resources protected by the park. The study area encompasses other sites that were excavated as part of the New Deal archeology programs yet not fully studied and published. The corridor also allows for the expansion in interpreting Native lifeways, as sites along the river were connected to each other. Engagement with descendant Creek peoples and incorporation of their worldview to understand resources within the river corridor would improve the understanding and interpretation of US history.

The historical park contains upland and bottomland forests similar to those of the study area, reflecting the two areas’ close proximity. While the forests of the study area are not nationally significant, these forests are fundamental to the study area’s functioning wildlife corridor that provides for seasonal migration and dispersal for wide-ranging animal species—in particular the central Georgia black bear population. This corridor also serves as a pathway for the exchange of genes necessary to maintain viable populations of plants and animals. The national historical park contributes to this corridor by providing additional undeveloped habitat in which numerous species can live, but the unit itself is not large enough to allow wide-ranging animals to fulfill their life histories. Therefore, the study area would expand upon and enhance the resources found at the national historical park.
Congaree National Park

Originally established in 1976 as Congaree Swamp National Monument, the park was created “to preserve and protect an outstanding example of a near-virgin southern hardwood forest situated in the Congaree River floodplain in Richland County, South Carolina” (PL 94-545). Congress redesignated the monument Congaree National Park in 2003 (PL 108-108). Included within the park’s borders are 11,000 acres of old-growth forest, the largest contiguous tract of southern old-growth bottomland forest remaining in the United States.

Although largely a wilderness today, the park has a long history of human use and occupation. For thousands of years Native Americans hunted, fished, and gathered plant materials in the rich floodplain environment. The Europeans and enslaved Africans who came after them ran livestock in the bottoms and grew crops on the higher floodplain ridges and natural levees. The park protects sites important to people traditionally associated with the lower Congaree watershed.

Among these are descendants of such groups as Native Americans, enslaved Africans, free people of color, European settlers, planters/plantation owners, farmers, boatmen, ferrymen, railroad employees, and loggers. These traditionally associated people include families north and south of the river with longstanding ties to the floodplain, as well as people from farther away who hunted and camped in the floodplain for many years before it was a park. The National Park Service works to provide a diverse visiting public with access to, and understanding of, the lands, resources, and stories of the park.

While the Ocmulgee River corridor has some similarities with the cultural and ethnographic resources associated with Congaree National Park, the Congaree River corridor saw less intensive use by Native peoples than the Ocmulgee River corridor. No major mound complexes were constructed in the Congaree River corridor and it appears that less clearing for agriculture took place in floodplain areas, unlike what occurred along the Ocmulgee River corridor.
Furthermore, archeological investigations have been more limited in the Congaree River corridor, and the excavations which have occurred have not had the same impact in understanding the history of the southeastern United States or in revolutionizing archeological science. The excavations within the Ocmulgee River corridor were unique in both of these ways.

Both Congaree National Park and the study area contain bottomland forests in the floodplain of a major river (the Congaree River and Ocmulgee River, respectively), flanked by upland forests on terraces above the floodplain. But while the forests of Congaree National Park are nationally significant, those in the study area are not. Nevertheless, the forests of the study area are fundamental to the study area’s functioning wildlife corridor that provides for seasonal migration and dispersal for wide-ranging animal species—in particular, the central Georgia black bear population. In comparison, the ability of the Congaree River corridor to function as a habitat corridor that provides for seasonal and dispersal movements of wide-ranging animal species is limited by the city of Columbia upstream from the park and Lake Marion downstream from the park. Black bears in particular have only made sporadic appearances at Congaree National Park in recent years and are not known to have reproduced there in recent decades, as the species has been largely extirpated from the area.

**Everglades National Park**

Everglades National Park was authorized by Congress in 1934 and established 13 years later by President Harry S. Truman, who dedicated the park on December 6, 1947. The National Park Service works to provide a diverse visiting public with access to and understanding of the lands, resources, and stories of the park.
Everglades National Park protects places important for subsistence and for spiritual and ceremonial purposes, including sites associated with events, beliefs, and traditional stories of indigenous people. The lifeways of Native Americans, including the Calusa, Tequesta, Seminoles, and Miccosukees, can be seen in large-scale architectural shell works, shell tools, carved wood, and long-distance canoe trails.

The cultural resources within Everglades National Park are related to the cultural resources within the Ocmulgee River corridor, as Seminole and Miccosukee people consider the Calusa and the Creek people their ancestors. However, the Ocmulgee River corridor is distinct unto itself, a major homeland site of precontact ancestral Creek peoples living in the Southeast. As an example of Creek homelands in Georgia, the park expands and enhances the public understanding of the geographically connected history of precontact ancestral Creek peoples living in the Southeast, how they interacted with other Native peoples, and how their cultures adapted over time. The Ocmulgee River corridor also preserves the history of New Deal archeology and contemporary advances to North American archeological theory and practice on a scale not found elsewhere in the United States. While Everglades National Park enhances our understanding of postcontact Native tribes, including tribes with Creek ancestry in Georgia, the park fundamentally preserves and interprets cultural resources that are distinct from the resources within the Ocmulgee River corridor.

Both Everglades National Park and the study area serve an important ecological function in providing large landscape linkages that are important for wide-ranging species, such as black bears (Florida and Georgia) and panthers (Florida).

These corridors serve as pathways for dispersal, migration, and the exchange of genes necessary to maintain viable populations of plants and animals. Both areas also function as a migration corridor for songbirds, linking breeding sites in North America with wintering areas in the Caribbean and Central and South America. However, the character of the two landscapes differs significantly in landform and vegetation. The vegetation in the study area is largely bottomland hardwood forests and upland hardwood-pine forests, and the habitat corridor is centered on the Ocmulgee River, while Everglades National Park contains a mixture of freshwater marshes, tropical hardwood hammocks, pine rocklands, mangrove estuaries, and coastal prairies.
Timucuan Ecological and Historic Preserve

The modern-day history of Timucuan Ecological and Historic Preserve begins with Fort Caroline National Memorial, authorized as a national park unit in 1950 to commemorate the 16th-century French effort to establish a permanent colony in present-day Florida. In 1988, legislation was enacted to establish Timucuan Ecological and Historic Preserve to be administered jointly with Fort Caroline National Memorial, which is within the boundary of the Timucuan Ecological and Historic Preserve. By enacting the 1988 legislation, Congress established protection for one of the remaining unspoiled Atlantic coastal wetlands and prehistoric and historic sites in the area. Today, the preserve encompasses 46,000 acres of diverse biological systems within the city limits of Jacksonville, the largest city in area in the continental United States by square miles. The St. Johns River, which passes through the preserve, has been recognized as both an American Heritage River and as one of America’s Great Waters. With over 200 archeological sites providing evidence of over 6,000 years of human habitation, as well as numerous historic structures, the park offers visitors a rich experience of the area’s natural and cultural history.

Much of the Timucuan Ecological and Historic Preserve is an estuary. Estuaries form transition zones between ocean environments and river environments and are subject to marine influences, such as tides and waves, and riverine influences, such as flows of fresh water and sediment. The inflow of both seawater and freshwater makes estuaries some of the most productive natural habitats in the world. The diverse biological systems within the park consist primarily of estuarine ecosystems, including salt marshes, coastal dunes, and upland hardwood hammocks, and salt, fresh, and brackish waters. The preserve is also designated an Outstanding Florida Water. The ecological zones in the preserve serve as habitat for pods of dolphins, flocks of migratory birds, and a number of rare or sensitive species such as the Atlantic loggerhead sea turtle, the West Indian manatee, the wood stork, and the bald eagle.
Visitors experience these natural areas through walking trails and fishing and boating areas.

Inhabited for over 6,000 years, the area contains archeological sites that illustrate one of the oldest and longest periods of human habitation in the Southeast region of the United States. Shell middens and ceremonial shell rings serve as archeological evidence of early Native American occupation of the region and provide insight into the lives of the Timucua and other Native American civilizations in the time before European contact. The history of French, Spanish, English, Union, and Confederate control of the area has also been documented and interpreted for visitors. The history of human interaction with the estuarine environment as told by the prehistoric and historic sites serves as a background for interpreting the modern day uses and management of the local area.

Timucuan Ecological and Historic Preserve contains unique cultural resources not found within the Ocmulgee River corridor. The Timucua chieftainships, which give their name to the preserve, were the geographically largest population of Native Americans in the territory, now the state of Florida. They were a gateway community where ideas, customs, and commerce flowed between the cultures of the Southeast and Caribbean. However, with the arrival of Europeans in Florida in the 1500s, European and allied Native American violence and disease wiped out the Timucua people. By 1800, there were no more Timucua people left, and one of the goals of the preserve is to remember how the Timucua lived. Archeological sites within the preserve include archeic shell rings and middens as well as the first excavations focused on the archeology of slavery and plantation life. Timucuan Ecological and Historic Preserve maintains cultural resources and ethnographic heritage of enslaved Africans and African Americans and is part of the Gullah Geechee Cultural Heritage Corridor and is a Network to Freedom partner.

Unlike the cultural resources at Timucuan Ecological and Historic Preserve, those within the Ocmulgee River corridor retain ethnographic relationships and importance to descendant Native peoples, providing cultural continuity and connections even after these peoples were forcibly removed from their homelands by the U.S. government. Furthermore, while the excavations at Timucuan Ecological and Historic Preserve are groundbreaking for their focus on the archeology of slavery and plantation life, the techniques and processes used for these excavations were modernized and refined during the earlier New Deal excavations along the Ocmulgee River corridor.

Both Timucuan Ecological and Heritage Preserve and the study area serve an important ecological function in providing a large area of natural habitat that provides pathways for dispersal, migration, and the exchange of genes necessary to maintain viable populations of plants and animals. However, the character of the two landscapes differs significantly in landform and vegetation. The vegetation in the study area is largely bottomland hardwood forests and upland hardwood-pine forests, and the habitat corridor is centered on the Ocmulgee River. In contrast, the preserve consists of large areas of salt marsh, some wetlands, and uplands that are a mosaic of maritime hammock, xeric hammock and coastal scrubs, and slash pine and restored longleaf pine flatwoods.
Similar Resources Outside the National Park System

Savannah River Corridor

The Savannah River forms the border between the states of Georgia and South Carolina and flows through four physiographic regions (Blue Ridge Mountains, Piedmont, Upper Coastal Plain, and Lower Coastal Plain). The comparison below focuses on the section of the Savannah River corridor that is within the Upper Coastal Plain and most like the Ocmulgee River corridor.

The Savannah River corridor is a mixture of federal, state, and private ownership. The US Department of Energy owns the Savannah River site, located on the upper Atlantic Coastal Plain, south of Aiken, South Carolina. Vegetation at the site generally consists of four major forest types: (1) mixed pine-hardwoods, (2) sandhills pine savanna, (3) bottomland hardwoods, and (4) swamp floodplain forests. These forest types are accessible to the public when visiting the Crackerneck Wildlife Management Area, which is owned by the US Department of Energy and managed by South Carolina Department of Natural Resources. The wildlife management area makes up a small portion of the Savannah River Site and is open only during designated dates and times, with public access being tightly controlled. The wildlife management area offers diverse recreational opportunities for hunting, fishing, and non-consumptive uses.

There are four other state-managed wildlife management areas in the Coastal Plain section of the Savannah River corridor: Hamilton Ridge, Webb, Palachuacola, and Tillman Sand Ridge Heritage Preserve. These wildlife management areas contain bottomland hardwood forests, cypress-tupelo swamps, and upland pine forests. These wildlife management areas offer diverse recreational opportunities for hunting, fishing, and non-consumptive uses.

Further southeast on the Savannah River, the Savannah National Wildlife Refuge lies within the Southern Coastal Plain “Floodplains and Low Terraces” and “Sea Islands/Coastal Marsh” ecoregions. Total current refuge acreage consists of 29,175 acres of freshwater marshes, tidal rivers and creeks, and bottomland hardwoods. About one half of the refuge is bottomland, composed primarily of cypress, gum, and maple species. Access to this area is by boat only. The refuge offers diverse recreational opportunities for hunting, fishing, and non-consumptive uses.

The Savannah River corridor has similar though distinct natural and cultural resources to the Ocmulgee River corridor. Native Americans settled along the Savannah River, just as along the Ocmulgee River. Paleo-Indian period sites (15,000–8000 BCE) have been documented along large stream systems within the Coastal Plain, Fall Line, and the Piedmont. Subsequent habitation and use of the Savannah River corridor has been attested at various levels through the period of contact with Europeans. By 1674, British traders had contacted Creek people along the Savannah River and had begun to engage in trade, with trade being centered at Savannah Town along the Savannah River after 1680. Following the Yamasee War (1715–1716), the British built a fort near the abandoned Savannah Town, Fort Moore, to defend the British frontier and develop trade with the Native peoples. Fort Augusta followed in 1735. By 1773, Native peoples from the Creek and Cherokee Nations were indebted to British traders, and they were forced to sign a treaty ceding their tribal lands between the Little and Tugaloo Rivers to settle their debts.

The Fort Moore and Savano (Savannah) Town sites were added to the National Register of Historic Places in 1973, and the national register nomination form notes that the sites were on private land and not accessible to the public.
In 1985, a historic marker was erected by the Andrews Masonic Lodge, Beech Island, on the site of the fort and town, and as of 2010 the historic marker was still standing on the site. There are no wayfinding signs to direct visitors to the historic marker from the road, and no other interpretation at the site. The Savannah River Archaeological Research Program, a division of the South Carolina Institute for Archeology and Anthropology, manages all of the archeological and historic resources for the Savannah River Site, owned by the US Department of Energy, and works closely with the US Forest Service – Savannah River to ensure compliance in areas that have been slated for logging activities. The research program produces articles, newsletters, conference papers, web series, and videos for educational purposes.

Both the Savannah River corridor and the study area contain bottomland forests in the floodplain of a major river (the Savannah River and Ocmulgee River, respectively), with upland forests on terraces above the floodplain. As such, they are both part of a long, relatively undeveloped riverine corridor that can provide for dispersal, migration, and the exchange of genes necessary to maintain viable populations of plants and animals. However, black bears are only transient along the Savannah River corridor; in South Carolina, the only sustainable black bear populations are in the northwestern and southeastern parts of the state. In comparison, the study area is known as a functioning wildlife corridor that provides for seasonal migration and dispersal of Georgia’s central black bear population.

Furthermore, only some sections of the Savannah River corridor are protected for resource preservation and public enjoyment by other federal agencies, tribal, state, or local governments, or the private sector. Large sections of the corridor are privately owned and not open to the public.

The study area, by providing public access to the natural and cultural resources present along the Ocmulgee River, could provide access to, and interpretation of, resources similar to those within the Savannah River corridor.

**Mobile-Tensaw Delta**

This region is home to some of the most diverse wildlife in Alabama and in the entire United States, and the delta is Alabama’s principal remaining natural terrain. The delta has been designated a National Natural Landmark and includes sections of Baldwin, Clarke, Mobile, Monroe, and Washington Counties in southwestern Alabama. The delta is about 45 miles long, ranges from 6 to 16 miles wide, and encompasses about 300 square miles. Through restoration and conservation efforts by a combination of federal, state, and private citizens, 185,500 contiguous acres of federal and state property are now preserved in the delta.
Natural resources of the Mobile-Tensaw Delta are comparable to those of the study area, particularly the northern section of the delta, which is similarly categorized as being within the “Southeastern Floodplains and Low Terraces” ecoregion. Within the publicly owned Upper Delta Wildlife Management Area, vegetation associations consist of seasonally flooded bottomland hardwoods and permanently flooded swamp forests. Overstory species include bald cypress (*Taxodium distichum*), water tupelo (*Nyssa aquatica*), sweetgum (*Liquidambar styraciflua*), sugarberry (*Celtis laevigata*), green ash (*Fraxinus pennsylvanica*), laurel oak (*Quercus laurifolia*), Nuttall oak (*Q. nuttallii*), overcup oak (*Q. lyrata*), water oak (*Q. nigra*), willow oak (*Q. phellos*), red maple (*Acer rubrum*), American elm (*Ulmus americana*), and water hickory (*Carya aquatica*). The lower Delta differs from the study area in that it is largely a mixture of shallow bays, channels, marshes, and low-lying forests all belonging to the “Gulf Barrier Islands and Coastal Marshes” ecoregion. The region features numerous interconnected stream systems, floodplains, swamps, bayous, lakes, and forests and is home to an abundance of species of flora and fauna, including 500 plants, 300 birds, 126 fishes, 46 mammals, 69 reptiles, and 30 amphibians. In particular, the Mobile-Tensaw Delta contains one of the two breeding populations of black bears in Alabama. Ecosystems vary among 20,000 acres of open water, 10,000 acres of marsh, more than 70,000 acres of swamp, and more than 85,000 acres of bottomland forest. The greater Mobile-Tensaw River area is largely undeveloped and thus serves as an uninterrupted corridor for the movement of species in and out of the Central Gulf Coastal region.

Evidence of human habitation in the delta dates back some 5,000 years at the Fuller Site, a shell midden overlooking both the delta and the bay. The area supplied these early inhabitants with abundant fish, shellfish, game animals, plant material, and clay and mineral resources. About 700 years ago Mississippian period people built earthen mounds adjacent to Bottle Creek and the Tensaw River. As the Mississippian tradition declined, other peoples moved into the area, including the Alabamas, the Mobilians, the Taensas, the Creeks, and the Choctaws. Spanish forces passed through the area in the mid-16th century, and a French expedition established the initial settlement of Mobile in the early 18th century among the Native Mobilian people.

Visitors can enjoy a variety of outdoor activities such as hunting, fishing, canoeing, and camping. At Five Rivers, Alabama’s Delta Resource Center, visitors can view wildlife as well as take in programs and demonstrations on a variety of topics. The Bartram Canoe Trail can be found in the upper reaches of the Delta with routes for day trips and floating camping platforms for overnight stays. There are 7.5 miles of trail available through the Jacinto Port Trail System for hikers, bikers, and horseback riders, and hunting is available on the Upper Delta, the Mobile-Tensaw Delta, and the W. L. Holland Wildlife Management Areas.

Visitors can also learn about one of the most important prehistoric Native American sites in Alabama, Bottle Creek, located on Mound Island in the heart of the Mobile-Tensaw Delta. The largest mound complex on the northern Gulf coastal plain, Bottle Creek was designated a National Historic Landmark on March 10, 1995, joining Moundville Archaeological Park as the only other Native American site so recognized in Alabama. Bottle Creek was occupied from about 1250 CE and probably served as the principal political and religious center for the Pensacola culture for three centuries before European contact.
Bottle Creek continued to be an important site for Native Mobilian people into the 18th century. Though the site itself is remote, tours are offered and visitors can read interpretive signs at two locations, at the Five Rivers Delta Resource Center and the Historic Blakeley State Park.

The cultural resources within the Mobile-Tensaw Delta have some striking similarities with those within the Ocmulgee River corridor. The Bottle Creek site represents the remnant of a large Mississippian ceremonial complex, which shows connections with other Mississippian communities in the southeastern United States. Descendant peoples from the Mobile-Tensaw Delta have also maintained an ancestral connection to this site and other sites in Alabama, much like descendant peoples from the Ocmulgee River corridor. However, despite these similarities, the Ocmulgee River corridor is unique in that the earliest human habitation in the area predates the Fuller Site in the Mobile-Tensaw Delta by approximately 10,000 years. Furthermore, descendant Creek people recognize the Ocmulgee River corridor as where their ancestors first confederated after migrating east, and the ancestral Creek Confederacy was made up of multiple Native American societies, ethnicities, and languages, distinct from Native American people, societies, ethnicities, and languages present in the Mobile-Tensaw Delta. The Ocmulgee River corridor stands on its own and tells a separate story not duplicated in the lands and waters of the Mobile-Tensas Delta. Moreover, the archeological survey and investigations conducted within the delta have occurred much more recently (1980s–1990s) with advanced modern scientific techniques, unlike the New Deal investigations within the Ocmulgee River corridor, which initiated archeological scientific techniques and ushered in the field of cultural resource management.

Thus, the research that has been conducted within the Mobile-Tensaw Delta has benefited from the foundations laid along the Ocmulgee River corridor in terms of investigative technique and in available knowledge of Native American history before European contact in the Southeast.

A large portion of Mobile-Tensaw Delta is protected for resource preservation and public enjoyment, and the natural resources are generally comparable to those within the Ocmulgee River corridor. Viewed solely from this perspective, the study area duplicates in some ways the Mobile-Tensas Delta and other protected stretches of bottomland hardwood forest in the southeastern United States. However, what distinguishes the study area from the delta is the long history of documented human occupation along the Ocmulgee River, the wealth and variety of known archeological sites in the river corridor, the comparative integrity of many of these sites, and the active and ongoing relationship of the Creek people with the area they consider a principal homeland. This combination of attributes is unique to the Ocmulgee River corridor. Accordingly, the resources of the Ocmulgee River corridor are not comparably represented and protected for public enjoyment by the Mobile-Tensas Delta. For the same reasons, the Ocmulgee River corridor does not duplicate the principal resources of the Mobile-Tensas Delta.

**Wateree River Corridor**

The Wateree River, a tributary of the Santee River in South Carolina, is a continuation of the Catawba River, which flows from the Blue Ridge Mountains in North Carolina. The corridor was named for the Wateree Native Americans, who had migrated to the area from western North Carolina.
Protected areas within the Wateree River corridor include the Wateree River Heritage Preserve Wildlife Management Area, Manchester State Forest Wildlife Management Area, Poinsett State Park, the eastern end of Congaree National Park, South Carolina Public Service Authority lands, and privately owned properties in the corridor under conservation easements.

The Wateree River Heritage Preserve Wildlife Management Area is managed by the South Carolina Department of Natural Resources. The property contains 4,487 acres adjoining the Wateree River and is managed to protect wetlands and other natural systems. All cultural and historic features are protected. Fishing, hunting, hiking, nature observation, and outdoor education are encouraged.

Over 5,600 acres east of Fort Jackson Military Base and south of McEntire Joint National Guard Base are under conservation easement but remain in private ownership. These four properties permanently protect significant green space. Additional conservation easements in excess of 15,000 acres exist on various private tracts along the river. Some of these easements allow boat-in camping at designated sites.

Manchester State Forest Wildlife Management Area is managed by the South Carolina Department of Natural Resources. The property contains 21,500 acres; just over 4,000 acres of this are within the floodplain of the Wateree River, while the rest is in the uplands above the river.

Poinsett State Park is managed by the South Carolina Department of Parks, Recreation, and Tourism. The approximately 1,000-acre site is adjacent to the Wateree Swamp and contains a mixture of steep hills and bluffs, pine and hardwood forests, and swamp. The park is open to the public and encourages hiking, biking, fishing, canoeing, boating, camping, and horseback riding.

The lower reach of the Wateree River is straddled by Congaree National Park on the west and conservation lands of the South Carolina Public Service Authority on the east. Some 5,000 acres is protected in the vicinity of the river, and these protected areas are contiguous to much larger protected areas along the Congaree and Santee Rivers.

Prior to the Wateree people, Mississippian people lived along the Wateree River with the town of Cofitachequi, founded around 1300 CE and serving as the paramount chiefdom. Cofitachequi was encountered by Hernando do Soto in 1540. While the search for the location of Cofitachequi is ongoing, the archeological and mound site of Mulberry Mound is thought to correspond most closely to the description of Cofitachequi. The Wateree people were attested by Juan Pardo as living inland near the Cherokee frontier in 1566–1567 and possibly on the upper Yadkin River in 1670. Congaree people lived in small settlements around the Cofitachequi area by 1701 CE, and the Wateree people lived in the area until the early 18th century, when they were displaced by mostly English settlers during the Yamasee War. Linguistic analysis suggests that there were Siouan, Iroquoian (Cherokee), and Muskogean speakers who also made up the Native groups living in the area, though research is ongoing. Toward the middle of the 18th century, remaining Wateree people went to live with the larger Catawba people, and the Wateree people became extinct as a tribe.

The Mulberry Mound site, consisting of a mound and village complex south of Camden, was first investigated by the Bureau of American Ethnology in 1891. Investigations stopped suddenly and no further research occurred until 1952, when Arthur R. Kelly profiled Mound A, which had been eroding into the river, and a portion of the village site.
Mound A has continued to erode into the Wateree River, and the other mounds and village site were destroyed by agriculture or bulldozing. The University of South Carolina began conducting archeological investigations at the site in 1973 and has continued excavations in subsequent years. Though the site is privately owned, the university’s excavations have produced a number of publications. The Wateree Archaeological Research Project has also tested the Mulberry Mound site as well as the two other nearby mound/village sites along the Wateree River, the Adamson site (1400–1700 CE) and the Belmont Neck site (900–1300 CE), both held in private ownership.

While there is still research to be done, Cofitachequi was an important Mississippian polity, and the culture possibly a variant of the Lamar culture found within the Ocmulgee River corridor. However, despite the possible similarities, the cultural resources within the Wateree River corridor are different than those of the study area, and the sociopolitical organization of Native American people living along the Wateree River corridor before and after European contact differs from Native American sociopolitical organization along the Ocmulgee River corridor. There are also stronger ethnographic and cultural connections to the Ocmulgee River corridor by native peoples, as descendant Creek people continue to maintain their tribal connection to the Ocmulgee River corridor and return frequently. In contrast, the Wateree people, extinct as a tribe, joined the Catawba people. From the mid-19th century, some Catawba remained on 1 square mile of reservation; others went to join Cherokee people living in western North Carolina. In time, some Catawba people returned to South Carolina, and still other Catawba people were forcibly removed by the US government to the Choctaw Nation in Oklahoma.

As of the 2010 census, 841 people live within the Catawba Reservation near Rock Hill, South Carolina along the Catawba River. The majority of the over 3,000 citizens of the Catawba Indian Nation live on or near the reservation, which is recognized as Catawba homelands.

While some archeological sites within the Ocmulgee River corridor have been lost to agriculture or development, the mounds and village complex on the Macon Plateau and Lamar have been better preserved than those on the Wateree and are more accessible to the public by virtue of being included within an NPS unit. The remaining cultural sites along the Ocmulgee River corridor have been protected and preserved, in many cases due to their location on land managed by other federal and state agencies. Conversely, the important mound and village complexes which have been mentioned above are held in private ownership within the Wateree River corridor.

Both the Wateree River corridor and the study area contain bottomland forests in the floodplain of a major river (the Wateree River and Ocmulgee River, respectively), with upland forests in the terraces above the floodplain. However, the forests of the study area are fundamental to the study area’s functioning wildlife corridor that provides for seasonal migration and dispersal for wide-ranging animal species—in particular, the central Georgia black bear population. In comparison, the ability of the Wateree River corridor to function as a habitat corridor that provides for seasonal and dispersal movements of wide-ranging animal species is limited by the city of Camden upstream from the park and Lake Marion downstream from the park. Black bears, in particular, have only made sporadic appearances in central South Carolina in recent years and are not known to have reproduced there in recent decades as the species has been largely extirpated from the area.
In short, the Ocmulgee River corridor is distinguished from the Wateree River corridor by the wealth and variety of known archeological sites along the Ocmulgee, the comparative integrity of many of these sites, the active and ongoing relationship of the Creek people with the area they consider a principal homeland, and the corridor’s successful functioning as a habitat corridor for large mammals. Accordingly, the resources of the Ocmulgee River corridor are not comparably represented and protected for public enjoyment by the Wateree River corridor and the study area does not duplicate the principal resources of the Wateree River valley.

**CONCLUSION: SUMMARY OF SUITABILITY EVALUATION**

The National Park Service has determined, based on the combination of resource values in the Ocmulgee River corridor, that the study area is suitable for inclusion in the national park system based on the analysis of suitability. The Ocmulgee River corridor has an overall combination of resource values that are not found in other national park units or comparably managed sites. Represented within these themes are habitat corridors, blackland prairies, New Deal archeological history, and ethnic homelands for descendant Creek peoples.

The significant natural and cultural resources of the Ocmulgee River corridor are managed by the US Fish and Wildlife Service, the Georgia Department of Natural Resources, and a number of private owners.

Resource management by the US Fish and Wildlife Service and the Georgia Department of Natural Resources provides comprehensive resource protection of public lands, but education and interpretation of the significance of the Ocmulgee River corridor is less than it could be in many areas (e.g., habitat connectivity, ethnographic resources), primarily due to the governing mission of the managing agencies, as well as funding and staffing limitations. The National Park Service’s expertise and emphasis on interpretation, education, and visitor management could expand and enhance the visitor experience in the Ocmulgee River corridor and would allow for more comprehensive education and interpretation of all of the interpretive themes related to its national and regional significance.

The overall combination of resource values represented by the Ocmulgee River corridor is not comparable to any other existing national park unit. The national park unit that is closest in representation to the combination of themes represented by the study area is Ocmulgee Mounds National Historical Park. However, based on the theme-based comparative analysis, there are outstanding qualities represented in the study area which are not comparably represented in Ocmulgee Mounds National Historical Park—for example, the study area being notable as a functioning wildlife corridor that provides for seasonal migration and dispersal for wide-ranging animal species and in particular, the central Georgia black bear population.

The combination of themes represented in the Ocmulgee River corridor and its close proximity to the greater Atlanta metropolitan region with over 5.6 million residents means that this area has excellent potential for expanding opportunities for interpretation, education, and scientific study. This study concludes that Criterion 2 – Suitability is met.
Chapter 5: Feasibility and Need for NPS Management

CRITERIA FOR ESTABLISHING FEASIBILITY

An area that is nationally significant and meets suitability criteria must also meet feasibility criteria to qualify as a potential addition to the national park system. To be feasible as a new unit, any natural systems or historic settings must be of sufficient size and appropriate configuration to ensure long-term protection of the resources and visitor enjoyment (taking into account current and potential impacts from sources beyond its boundaries) and have the potential for efficient administration by the National Park Service at a reasonable cost. A variety of factors may affect feasibility, including landownership, acquisition costs, access, threats to the resource, and staff or development requirements. The feasibility evaluation also considers the ability of the National Park Service to undertake new management responsibilities in light of current and projected availability of funding and personnel.

In evaluating the feasibility Ocmulgee River corridor as a national park unit, the National Park Service considered the following factors:

- level of local and general support
- land ownership patterns (including landowners’ level of support)
- access and public enjoyment potential
- threats to resources and existing degradation
- size and boundary configuration
- economic/socioeconomic impacts of designation as part of a unit of the national park system
- costs associated with acquisition, development, and operations

The feasibility factors are described in detail below.

EVALUATION OF FEASIBILITY

Level of Local and General Support

During the civic engagement process for the study, from January 25 through March 26, 2021, the National Park Service solicited feedback on the project’s website and on an interactive StoryMap platform.
The team also hosted two virtual public meetings on February 16 and 17. Approximately 70 people attended the two virtual public meetings and provided informal feedback on the study. Another 2,664 people and organizations submitted correspondences online, by email, and by mail. These correspondences came from across the country, but the majority (1,584, or 59%) came from Georgia. Around half of the correspondences received were form letters, meaning the National Park Service received 1,344 unique correspondences.

The National Park Service received comments both in support of designation and in opposition to it. However, a significant majority of the public comments were in favor of NPS designation. Those expressing support focused their comments on protecting the area from development and associated pollution and the expectation that the National Park Service would bring a cohesive experience to the network of protected sites, making the area an attractive destination. Supporters also highlighted the lack of national park units in the Southeast that have a wide range of natural, cultural, and recreational potential.

A small minority of commenters expressed strong opposition to NPS management. These commenters focused their comments on the concern that NPS management would bring hunting restrictions or would harm game management in a general sense. Those in opposition to designation expressed support for current land management agencies and generally preferred more local management to federal management. Concern about loss of property rights and the limitations of NPS funding were also mentioned by those in opposition to designation.

A few commenters expressed support for current land managers and their unique missions, but with the nuance that an increased NPS presence in the area would be beneficial and could support collaborative, multiagency management. However, other comments noted that there would be advantages to management by one organization or agency to provide uniformity and consistency in policy and direction. A more detailed analysis of the breadth of public visions for the Ocmulgee River corridor is included in appendix C.

Local and federal government officials generally did not weigh in on the potential park designation during the civic engagement process. However, Macon’s mayor pro tem, Seth Clark, is also directing the Ocmulgee National Park and Preserve Initiative, a group working for designation of a national park unit along the Ocmulgee (Dixon). So, it can reasonably be inferred that Macon city leadership is in support of designation.

A group of five Georgia state representatives did introduce a resolution “expressing concern regarding the National Park Service’s Special Resource Study of the Ocmulgee River Corridor” in March of 2021 (HR 529). The bill does not explicitly express opposition to the creation of a national park unit along the Ocmulgee, but rather includes “support for the constitutionally protected right to hunt and fish in Georgia” and asserts “Georgia’s primacy in the management of the state’s fish and wildlife resources.” The bill urges the Georgia Department of Natural Resources to “remain the primary authority for all purposes of wildlife management and regulation in the case that a national park unit is established in the study area,” insists that lands operated by the Georgia Department of Natural Resources be managed to provide hunting, and encourages any park enabling legislation to include hunting and fishing as allowed “primary” uses. While the bill received two readings in the House in January of 2022, it does not appear to have proceeded any further.
The five representatives’ districts do not include the study area (Georgia General Assembly, HR 529).

A number of local and national nongovernmental organizations expressed support for designation, including the Center for Biological Diversity and the Defenders of Wildlife, the Georgia Conservancy, the Georgia Wildlife Federation, the National Parks Conservation Association, the National Trust for Historic Preservation, the Ocmulgee National Park and Preserve Initiative, The Nature Conservancy, and several others. Organizations dedicated to supporting tourism and economic development in the area also expressed their support for designation, including the Cochran-Bleckley Industrial and Economic Development Authority, the Hawkinsville-Pulaski Chamber of Commerce, and Visit Macon.

Overall, the public sentiment expressed during civic engagement and in other public venues is in support of designation. However, a smaller, yet vocal, minority is strongly opposed to designation. Therefore, designation of a national park unit would be feasible under this factor.

Land Ownership Patterns, Including Landowners’ Level of Support

The land within the study area boundary is currently owned by the State of Georgia, the US government, the Muscogee (Creek) Nation, and numerous private individuals and corporations. Lands owned by the State of Georgia are managed by the Georgia Department of Natural Resources and comprise the three wildlife management areas in the study area (Oaky Woods, Ocmulgee, and Echeconnee Creek), while the lands owned and leased by the US government comprise Bond Swamp National Wildlife Refuge and are managed by the US Fish and Wildlife Service.

Bond Swamp includes 7,696 acres in the northern portion of the study area. Echeconnee Creek (849 acres), Oaky Woods (12,750 acres), and Ocmulgee (15,000 acres) Wildlife Management Areas lie further south in the study area. The 126 acres owned by Muscogee (Creek) Nation are in the northern portion of the study area adjacent to Bond Swamp National Wildlife Refuge. The remaining privately owned lands are interspersed between these public and tribally owned lands.

Georgia Department of Natural Resources

The Georgia Department of Natural Resources (GADNR) Wildlife Resources Division manages three wildlife management areas totaling over 28,000 acres in the study area. Most of this land is owned by the state in fee simple, though about 5,000 acres are leased. These wildlife management areas (WMAs) are dedicated to active conservation and allow for public access, primarily hunting and fishing. The study team received comments from the Georgia Department of Natural Resources during the public comment period, met with department’s Wildlife Resources Division (WRD) staff in January 2022, and received written responses to an NPS questionnaire from the department in March 2022.

In comments submitted during the initial public comment period, the Georgia Department of Natural Resources indicated that the three wildlife management areas should be removed entirely from the study area boundary. During the subsequent discussion and written responses, the department clarified that “DNR retains final authority and sovereignty with regards to decision making on WMAs” and suggested that “NPS should consider a reduced boundary that could extend from the current National Historic Site footprint to Bond...
Swamp NWR and Browns Mount including Tobesofkee Creek to the west running south to the northern boundary of Echeconnee Creek WMA and Robins Air Force Base.” Throughout all communications, GADNR staff were clear that they were not interested in wildlife management area land becoming part of a national park and subject to direct NPS management.

The Georgia Department of Natural Resources’ opposition to an NPS presence on (or near) wildlife management areas stems from concerns that the two agencies’ missions, while containing some overlap, are not entirely compatible. In their written responses to the questionnaire, they state, “Extending the NPS boundary to include lands already conserved and actively managed by the State may introduce challenges that could interfere with or impede WRD’s mission.” As an example, GADNR staff cited restrictions on archery hunting and live-bait fishing at the existing Ocmulgee National Historical Park that are inconsistent with the Georgia Department of Natural Resources’ focus on these consumptive recreational uses. The GADNR staff expressed concern that if more land along the Ocmulgee River corridor was designated as part of a national park site, it could mean loss of white-tailed deer hunting, which is an important herd management tool for the state.

The Georgia Department of Natural Resources’ opposition to an NPS presence on or near wildlife management areas also stems from the state’s emphasis on active management techniques (e.g., prescribed fire, timber harvest) to achieve conservation goals and the belief that having federal land management could complicate that active management. In the Georgia Department of Natural Resources’ written response, they state, “Active management and conservation of natural resources is time sensitive.

Applied management prescriptions must often be implemented within seasonal frameworks and frequency intervals to achieve desired natural resource goals. In our experience with some federal agencies, resource management activities are often delayed, constrained, or prevented by complicated, complex, or burdensome environmental review policies or procedures that seem to exceed what is statutorily required. Occasionally, these challenges are amplified by subsequent litigation usually related to technicalities of such policies and procedures. This can have short and long-term negative effects on wildlife populations and meeting habitat objectives.”

An important nuance is that the Georgia Department of Natural Resources often works beyond its wildlife management area boundaries and partners with adjacent private landowners to achieve game management objectives. The Georgia Department of Natural Resources is generally concerned that an NPS presence on these neighboring lands, even though it would not change management of its lands, would adversely impact its mission. For example, the Georgia Department of Natural Resources may typically work with a landowner to conduct a prescribed burn that bolsters wildlife habitat near a wildlife management area. If that land were managed by the National Park Service, however, they fear National Environmental Policy Act and other environmental review requirements would prevent or delay that from happening, thus impacting their mission.

US Fish and Wildlife Service

Bond Swamp National Wildlife Refuge is managed by the US Fish and Wildlife Service (USFWS) to conserve wildlife and habitat and allows for public access and wildlife dependent recreation, especially hunting and fishing, on the 7,696 acres it owns in the northern part of the study area.
The study team met with USFWS staff in January 2022 as part of the feasibility analysis for the study.

In meetings with the US Fish and Wildlife Service, it identified a preference to maintain independent management of Bond Swamp as a national wildlife refuge. The US Fish and Wildlife Service supports potential opportunities to conserve resources within the corridor and is prepared to utilize its authorities in this regard, including contributing to shared conservation goals with other agencies in the corridor as it does elsewhere. For example, the US Fish and Wildlife Service uses its authorities to manage the land for wildlife as a unit of the National Wildlife Refuge System while the National Park Service uses its authorities to manage cultural resources in the same area at the Merritt Island National Wildlife Refuge and Canaveral National Seashore. US Fish and Wildlife Service staff saw this collaborative partnership model as a potential option for the study area, with the National Park Service (via the existing Ocmulgee Mounds National Historical Park), the US Fish and Wildlife Service, Georgia Department of Natural Resources, Muscogee (Creek) Nation, and private landowners all working together for conservation (this potential model is explored in more detail in chapter 6).

**Robins Air Force Base**

Robins Air Force Base is adjacent to the nationally significant resource identified in chapter 3 and shares its eastern boundary with the study area. The Department of Defense and the Department of the Interior are joining forces to preserve land around military installations and improve access to outdoor recreation for millions of Americans and defense communities. Through the new Readiness and Recreation Initiative, the Department of the Interior’s National Park Service will provide $40 million in funding from unobligated Land and Water Conservation Fund balances to safeguard natural areas, protect water resources, preserve cultural heritage sites, and provide recreation opportunities for the public. The Readiness and Environmental Protection Integration (REPI) Program will provide a matching $40 million in funds to support projects within an existing REPI agreement area or an area that is actively developing a REPI agreement area. The Department of Defense has identified Robins Air Force Base as a REPI installation, which would be eligible for Readiness and Recreation Initiative funding.

**Muscogee (Creek) Nation and the Inter-Tribal Council of the Five Civilized Tribes**

The Muscogee (Creek) Nation represents over 91,000 Muscogee citizens and is recognized as the fourth largest tribe in the United States. The Ocmulgee region of Georgia is the tribe’s ancestral homeland, with Muskogean mound builders and other indigenous people occupying the area for over 17,000 years. The tribe maintains close political and cultural ties to the area. The tribe was forced to cede their homelands in the 1830s, and they were forcibly removed to Indian Territory (Oklahoma) during the Trail of Tears, (known to Muscogee people as nene estemerkv, or Road of Misery). Today, the tribe owns and manages 126 acres within the northern section of the study area boundary.

In their comments during civic engagement and in consultation with the NPS study team, the tribe expressed support for a “collaborative, multi-agency approach to managing the Ocmulgee.” The tribe stated this approach would best preserve, protect, and manage the land. The tribe owns land in the study area bordered on three sides by Bond Swamp National Wildlife Refuge. They are working with the Bureau of Indian Affairs to move those lands from fee simple ownership
into trust to ensure their conservation and protection and for the benefit of the tribe. Future plans for these lands are yet to be fully determined and the tribe is working to complete a variety of cultural and natural resource inventories to ensure appropriate resource protection into the future. Some possible future use include housing for tribal citizens, a visitor center for the public, and trails and interpretive opportunities. The Muscogee (Creek) Nation noted that opportunities to appreciate natural resources on public lands neighboring their property (Bond Swamp) are well developed and maintained by the US Fish and Wildlife Service, but there is little interpretation or public appreciation of the cultural history of the area. The tribe feels that they may be able to fill this void with future opportunities on their land and, perhaps even more importantly, through a more collaborative and co-managing relationship between the tribe and all of the land managers in the corridor.

The tribe noted that “the conservation of significant cultural and natural resources is a top priority to the (Muscogee (Creek) Nation)” and that “this can be achieved by taking a collaborative multi-agency approach for long term management of the Corridor.” In the tribe’s view, “a new park unit in the study area will help preserve known and unknown resources as well as create opportunities for more public education and recreation in the Corridor.” However, the tribe noted a respect for private property rights and indicated successful co-management of the corridor must include the input and participation of private landowners in order to ensure the successful conservation and protection of resources.

On September 24, 2022, the Muskogee (Creek) Nation passed a resolution affirming the tribe’s support for legislation expanding the existing Ocmulgee Mounds National Historical Park to form a new Ocmulgee National Park and Preserve that encompasses 80,000 acres of land between Macon and Hawkinsville, Georgia (Tribal Resolution 22-148). The resolution further affirms that the nation is “ready to engage in a collaborative multi-agency co-management approach to preserve, manage and interpret the critically important historical, cultural and environmental resources in the Ocmulgee River Corridor, as well as, potential enhancements to promote river-based recreation, local tourism, hunting and fishing and public education in areas that do not adversely impact cultural resources in a new National Park Service unit.”

The Inter-Tribal Council of the Five Civilized Tribes (ITC) is an organization that unites the tribal governments of the Cherokee Nation, Chickasaw Nation, Choctaw Nation of Oklahoma, Muscogee (Creek) Nation, and Seminole Nation of Oklahoma. Together, these tribes represent about 815,000 Indian people throughout the United States and is one of the oldest and largest tribal organizations in America. On October 7, 2022, the Inter-Tribal Council passed a unanimous resolution supporting the creation of an “Ocmulgee National Park & Preserve ... in order to preserve 80,000 acres in conservation under the National Park and Preserve status” (ITC Resolution 22-21). The resolution references and mirrors that of the Muscogee (Creek) Nation passed on September 24, 2022.

**Private Landowners**

Approximately 54,100 acres of undeveloped and minimally developed land within the study area boundary are privately owned. These private lands are divided into 189 private tracts owned by a variety of individuals and corporations. In February 2022, the study team sent letters to 20 of the largest landowners in the study area asking about their level of support for a national park designation that involves their property.
Landowners were also asked about any concerns they might have about a national park designation, any plans they have for future uses of their property, and if they would be willing to sell their property to the United States at fair market value at some point in the future.

The study team received responses from four of the 20 landowners. The first landowner did not think the study area was the best place for a national park, due to loud sounds from Robins Air Force Base, prevalence of litter and dumps, safety concerns, lack of access, frequent flooding, and adjacent development (see “Threats to Resources and Existing Degradation” section). The landowner was agreeable to the concept of selling to the United States but stated that a few practical considerations would likely prevent this from occurring. First, a neighbor has first right of refusal to purchase his land. Second, the landowner is not wealthy enough to accept a federally appraised “fair market value” sale which, in the owner’s view, would likely be less than what they could get on the open market. Lastly, the landowner seemed most interested in willing their land to heirs.

The second landowner was interested in selling to the United States at “fair market value” because they don’t want to sell to someone that would “damage the resources.”

A third landowner expressed support for the idea of a national park unit and an appreciation of the significance of the resources on their property and the surrounding lands. However, while supporting the designation of neighboring lands as part of a unit, they indicated no interest in a sale of their own property, which was purchased as a timber investment.

The fourth landowner, a corporation with legal representation, described through their attorneys how they planned to use their land to surface mine alluvial clay for use in the manufacture of bricks “very shortly” and that they would continue doing so “for the next several decades.” This landowner made it clear they “would have no interest at any point in the future in selling the property to the US Government.” They also made clear that they “would not support and would oppose the creation of a national park unit that includes (their property)” due to fears that a park designation would affect their private property rights and their “significant investment” in the property if laws regarding private lands within designated park units changed in the future. This landowner also described how neighboring properties had been used for similar industrial and extractive uses for many decades, and as such, would not make for an ideal national park unit.

The third and fourth landowners’ sentiments—opposition to selling to the United States—may be representative of the broader community of private landowners rather than that of the first two landowners, who were conceptually agreeable to selling to the United States for the creation of a national park unit. The relatively low (20%) response rate to the letters may be an indication that landowners are not in favor of a national park unit or willing to sell their land to the federal government to help create it. In that regard, the letter to each landowner stated that if no response was received, “we will assume that you have no interest in working with the National Park Service related to the potential establishment of a new national park unit including your property.” However, there are many reasons a private landowner may not have responded (e.g., loss of the correspondence, workload, busy schedules).

More to this point, over half of the 20 largest landowners are timber companies or similar extractive industrial firms like the fourth landowner. Like the fourth landowner, these private corporations presumably own the land for purposes of harvesting timber or
other extractive uses of the land. Given their profit-based motivation for land ownership, it is possible that some property owners may be willing to sell their land if the full value of the investment is captured in the federal appraisal. Sales of this type would need to outpace the extractive use across the entire corridor to adequately protect the cultural and natural resources of the study area.

Opposition to federal acquisition of private lands in the study area has been experienced by the US Fish and Wildlife Service, which shared that acquisition of lands for the expansion of Bond Swamp has been challenging. The acquisition boundary established for the national wildlife refuge in 1999 includes around 17,000 acres. So far, the US Fish and Wildlife Service has only acquired about 8,600 acres of that land (this number includes lands outside the study area). One of the biggest hurdles the US Fish and Wildlife Service has encountered is that private sellers are often unwilling to sell. Even when willing sellers are available, they are not necessarily willing or able to accept the “fair market value” that federal appraisers determine. Also, parcels that do become available tend to sell quickly on the open market, often in a matter of days, making the lengthy process of federal acquisition challenging (see the Acquisition Challenges section below for further analysis). While the US Fish and Wildlife Service has focused its acquisition efforts on a much smaller area than the broader study area, focusing mainly on inholdings and edge holdings along the refuge’s ownership boundary, its experiences reflect that there may be resistance to federal acquisition and/or technical challenges that prevent it from occurring.

Conclusion

The national significance of the study area (as described in chapter 3) is dependent upon the connectivity of the habitat corridor and cultural landscape. To protect that significance and realize its potential as a national park unit as envisioned in the study legislation, the protection of a large majority of the corridor would need to be accomplished. Overall, designation of a national park unit would not be feasible concerning the land ownership patterns in this study area. The largest public landowners in the study area, the Georgia Department of Natural Resources and the US Fish and Wildlife Service, prefer to continue owning and managing their lands independently from the National Park Service. Some of the largest private landowners in the study area, many of which are timber companies and extractive industries, may be opposed to the establishment of a national park or selling to the federal government. Those that are willing to sell on a conceptual level may be prevented from doing so due to practical considerations, including the time-consuming procedures of federal land acquisition. Some private landowners may be willing to sell, or like the Muscogee (Creek) Nation, wish to continue owning their land but welcome the National Park Service as a neighbor and as a larger coordinating leader or manager of a new Ocmulgee National Park and Preserve, but these landowners may be in the minority from an acres-owned perspective.

Access and Public Enjoyment Potential

Access to outdoor recreational opportunities in the study area are currently accommodated by the US Fish and Wildlife Service and the Georgia Department of Natural Resources. While these agencies’ missions may not focus on public access and enjoyment to the same degree that NPS management does, management by these agencies provides an adequate degree of public access and enjoyment.
In 1999, Bond Swamp National Wildlife Refuge opened to the “big six” forms of wildlife-dependent outdoor recreation (i.e., hunting, fishing, wildlife observation, photography, environmental education, and interpretation). Refuge managers estimate that 60–75% of public use is hunting and fishing, but visitors do participate in other activities. Birding and butterfly watching in particular are growing in popularity. The refuge maintains a few roads and parking lots to accommodate public access, as well as one boat launch. Other recreational opportunities on the national wildlife refuge are limited by the difficulty of access, as a four-wheel drive vehicle is needed at some times of the year to access parts of the swamp.

The US Fish and Wildlife Service is working with the Georgia Department of Natural Resources to install a second boat launch during the summer of 2022. This boat launch will cut the distance between boat launches (currently 22 river miles) in half and greatly improve access for river users, particularly day users and those looking for a shorter excursion. Bond Swamp does have the potential to interpret the historic Ray House, and plans are in place to make it an administrative office and visitor contact station, though the wildlife refuge does not currently have any interpretive staffing.

Hunting and fishing are also the primary visitor uses on the wildlife management areas, though canoeing, kayaking, geocaching, hiking, stargazing, horseback riding, biking, photography, exploring blackland prairies, and birding also occur. For the most part, these recreational uses occur organically and are not proactively facilitated. For example, the wildlife management areas have no formal trail system, but visitors do use the roads and mowed fire breaks for hiking. And while informational kiosks and maps show these hiking opportunities, visitors are unlikely to interact with GADNR staff, as there is no staff dedicated to providing interpretation or visitor services. Georgia Department of Natural Resources staff describe visiting the wildlife management areas as a “backcountry experience” that requires skill and assumption of some risk. Around 300,000 people visit Oaky Woods and Ocmulgee Wildlife Management Areas each year.

As the visitor opportunities at Bond Swamp and the wildlife management areas illustrate, a wide variety of outdoor recreational opportunities exist within the study area, and a potential national park unit would have a tremendous amount of public enjoyment potential, both on the river (e.g., paddle sports, boating and fishing) and on land (e.g., hunting, hiking, birding, biking, butterfly watching, geocaching, stargazing, horseback riding, and more). However, this conclusion presumes that any national park system unit would include the wildlife management areas and Bond Swamp, which is unlikely to occur (see “Land Ownership Patterns, Including Landowners’ Level of Support” above). As will be discussed at greater length in the “Size and Boundary Configuration” discussion below, once the lands included in the wildlife management areas and Bond Swamp are subtracted from the study area, much less opportunity exists for the National Park Service to provide public access and to help realize public enjoyment potential.

The reduced opportunities available to the National Park Service can be seen both in terms of river access and land-based access. Regarding river access, once the joint boat launch project between the Georgia Department of Natural Resources and the US Fish and Wildlife Service is completed at Bond Swamp, there will be a boat launch approximately every 10 river miles, with the exception of the southernmost 15-mile stretch between James Dykes Memorial Park and Hawkinsville. This means the river can already be accessed and explored in convenient 4–6 hour segments without any NPS presence.
As for land-based access, the National Park Service could have difficulty adding any additional access to the small, dispersed sites described previously. To create access, the National Park Service would need to acquire corridors connecting public roads with dispersed NPS parcels. For the reasons described above, acquiring such corridors from private landowners could be difficult. Even if road corridors were successfully acquired, much of the land in the study area is subject to regular flooding, making road construction and maintenance problematic. Road construction in wetlands leads to permitting and mitigation issues, while maintaining flood prone roads to a level that will support heavy visitor use can be expensive.

National Park Service management could substantially improve access to recreational opportunities in terms of providing more proactive orientation and interpretation services compared to what the Georgia Department of Natural Resources and the US Fish and Wildlife Service currently provide on their lands. However, these opportunities already largely exist just outside of the study area in Ocmulgee Mounds National Historical Park.

On balance, designation of a national park unit would not be feasible under this factor. While the study area is currently accessible and possesses many great recreational opportunities for public enjoyment, the National Park Service would not be able to provide substantially more or better opportunities beyond what exists under current management by other state and federal agencies. Due to road limitations in the area, access to any new recreational areas the National Park Service would manage would likely be difficult.

### Threats to Resources and Existing Degradation

Resources within the study area have been degraded over the past century or more by extractive industry like timbering and mining, expansion of agriculture, introduction of invasive species, acoustic impacts and development pressures from the adjacent Air Force base, pollution and trash dumping, expanding development, and looting of archeological sites. Many of these phenomena are expected to continue or increase in the coming years and decades and pose a threat to study area resources.

Timber harvests in the heart of the study area have had substantial impacts on the quality and condition of natural resources in the study area, particularly the bottomland hardwood ecosystem. The bottomland hardwood forests of the Ocmulgee River corridor have been logged throughout, and a majority of the forests have been extensively harvested for timber.
In fact, some parts of the study area were completely deforested in the early 20th century, and substantial areas are being logged at the present time. Due to this timbering activity, the approximate forest age ranges from zero (recent clearcuts) to over 120 years. Some of the natural hardwood ecosystems in the study area have been replaced by pine plantations, and conversion to planted pine appears to be accelerating in parts of the floodplain (see the “Analysis of Bottomland Hardwood Forests” section for further discussion of the forest condition). The degradation to the forests of the Ocmulgee is expected to continue and is an ongoing threat to resources. Much of the privately owned land along the river corridor continues to be managed for timber (GA DNR 2020a), and half of the study area’s 20 largest private landowners are timber companies.

Surface mining has also had substantial impacts on natural resources in the study area, and it is expected to continue. Mining in the study area is typically for clay, including kaolin, an important industrial mineral used in paper coatings, fertilizer, and as a filler. A large active kaolin mine is located south of the Bond Swamp National Wildlife Refuge. In a letter to the National Park Service, attorneys for a mining company described how lands west of the Ocmulgee River have been utilized for the mining of alluvial clay for use in the manufacture of brick products for many decades. These clay mining activities are anticipated to increase in coming years, with the letter stating that over 1,000 acres of land is anticipated to be mined “in the near future and for many years thereafter.” Public commenters also cited threats from surface mining as one of the primary threats to resources in the Ocmulgee region, as the form of dragline surface mining involved in clay and kaolin mining entails removal of all vegetation from the mined areas, removing any ecological integrity.

Portions of the Ocmulgee River have been cleared for agricultural purposes over the years. Public commenters described some of this agriculture as “unsustainable” and listed it among the threats to the health of the Ocmulgee’s natural resources. Clearing of the land for agricultural purposes threatens to fragment the habitat in the study area, hurting its potential as a wildlife habitat corridor and cultural landscape—the nationally significant resources the study area would potentially be protecting.

Invasive species have degraded natural resources in the study area and continue to be a substantial threat. Numerous invasive plant species are present in the study area, including Chinese wisteria, Chinese privet, Chinese tallow, Japanese climbing fern, Japanese stiltgrass, Chineaberry, Japanese honeysuckle, and kudzu. Privet, in particular, has intensely invaded the study area, likely due to extensive ground disturbance from intensive agriculture going back hundreds of years along the Ocmulgee River corridor (NPS 2020b). Current land managers in the study area treat for invasive plants, though staff at Bond Swamp clarified that this tends to be focused on areas next to developed zones. Feral hogs have caused damage to a variety of habitats in the study area by consuming items from across the food web, including roots and vegetation, hard and soft mast, invertebrates, amphibians and reptiles, bird eggs and young, small mammals, and the young of larger mammals. During public comment, some commenters focused on the threats posed by these invasive species—feral hogs, catfish, and invasive plants were frequently mentioned—and advocated for their removal to protect wildlife habitat and conserve a quality migration corridor. Increased temperatures and carbon dioxide, changes in precipitation, and disturbance due to extreme climate events can increase the survival, spread, growth,
and establishment of invasive species (IPCC 2014). These species could include rooting and burrowing mammals, southern pine beetles, and termites, which have the potential to cause direct damage to power, water, transportation, and building facilities, as well as increased tree mortality, hazard trees, and treefall (Vissichelli 2018).

The proximity of Robins Air Force Base affects the quality of the natural soundscape in the study area and potentially impacts other natural resources and safety in the study area. The Ocmulgee River parallels the base’s runways for roughly 6 river miles (Cook 2021). Large military transport planes, including C-5 Galaxy and C-130 Hercules, as well as F-15 fighter jets, take off and land less than a mile from the river. These planes are loud, with one landowner in the northern portion of the study area describing plane noise on their property as frequent, with sonic booms occurring “all the time.” In comments submitted to the study team, the Air Force also noted that there is a “firearms surface danger area” that extends to the river and an “explosive safety area arc” that extends into the floodplain area within the study area.

While unlikely to pose a significant threat to visitors (these arcs are based upon the unlikely possibility of firearm overshoot and the combined explosive power of munitions that are safely stored), they are nevertheless reasons to limit visitation in this area. Furthermore, in consideration of public safety and base security, Robins Air Force Base managers suggested that should a national park be considered on their eastern boundary, they would prefer that no public access be permitted between the base and the Ocmulgee River and that any public use be restricted to the river’s eastern bank and to the parcels to its east.

Pollution associated with litter, illegal trash dumping, illegal drug production, sewage, mining, and other activities has degraded the natural resources in the study area and continues to be a threat. Pollution was a common thread during public comment. Some commenters pointed to specific sources of pollution, such as city sewage potentially leaching into the river, a potential unlined coal-ash pond, illegal dumping of tires and plastics, expelled cartridges from hunting, and drinking and partying that introduce aluminum cans to the area. Many commenters recounted experiences of the shocking levels of trash they found while participating in river cleanup events. In conversation with the NPS study team, USFWS staff described how private landowners in the area will gate their property to prevent trash dumping, though trash often piles up at the gates.

Development around the edges of the study area is encroaching into the study area and continues to degrade and threaten resources and experiences there. In addition to the timbering, mining, and agriculture described above, developments such as solar farms, paper manufacturing facilities, water treatment plants, railroads and utility easements, housing subdivisions, and road
construction all threaten to fragment and impact the quality of natural resources and the function of the habitat corridor. In discussion with the study team, USFWS staff identified solar farms as one of the leading changes to land use that threatens the connectedness of the landscape, and GADNR staff also mentioned solar farms as a common threat to conservation along river corridors in Georgia. One of the landowners responding to the study team’s inquiries described a solar farm that was once the largest east of the Mississippi and located right next door to their property and identified more that are planned for the area.

The Graphic Packaging International paper manufacturing facility has operated along the Ocmulgee just north of Bond Swamp since 1948. This water-intensive facility pumps up to 18,000 gallons a day from the river and processes local pine trees and kaolin into paperboard (Cook 2021). Wastewater treatment facilities for the Macon Water Authority, Warner Robins, Robins Air Force Base, and likely others are located along the river. Railroads and utility corridors also crisscross the study area.

Housing subdivisions and related road development are expected to continue to cross the study area. During conversation with the study team, USFWS staff listed these developments as another one of the primary threats to the connectedness of the landscape. Threats from development were top of mind for many public commenters as well, with one public commenter citing a study suggesting that 39% of the study area is expected to be developed by 2060.

While the resource degradation to date has not prevented the study area from functioning as a wildlife habitat corridor (see the “Analysis of the Habitat Corridor Resource” section), an area needs to be relatively unfragmented with limited development to be identified as a potential habitat corridor. The ongoing nature of the development threats could eventually prevent the habitat corridor from functioning as such. These threats also have the potential to impact the quality of the potential visitor experience. When reviewing the “Ocmulgee River User’s Guide,” the reader or potential visitor will find that about half of the “points of interest” along the river are human developments (Cook 2021). The gravel bars, oxbows, and unique plants are equally interspersed with pipelines, mine pits, railroads, and industrial facilities. Notably, climate change in the area is likely to act as a “threat multiplier,” exacerbating many of the trends that threaten to degrade the resources in the corridor. For example, a significant increase in the amount of rain falling during heavy storms has occurred in the region, which affects flooding and erosion in river corridors. Extreme precipitation events will likely increase in frequency and intensity in the future (USGCRP 2017). Climate models also predict an increase in the intensity of tropical cyclones and an increase in the number of very intense tropical cyclones, with the potential to generate extreme rainfall and flooding events (Kossin et al. 2020).
Cultural resources in the study area have not been spared from the degradation and threats. Looting and vandalism of archeological sites, in particular, have impacted the quality of the resources. In conversation with the study team, USFWS staff described looting as a major law enforcement issue. In order to mitigate injury and to protect cultural resources into the future, high levels of staffing would be required to control these illegal occurrences. Overall, many of the archeological sites in the corridor have been previously excavated and/or damaged, while the integrity of others is unknown.

Designation of a national park unit would not be feasible under this factor. The degree of degradation that has already occurred and is likely to worsen substantially before the National Park Service could acquire the study area would pose challenges for NPS management of visitor safety and resource protection issues. A substantial amount of environmental cleanup and mitigation would be required to address pollution and contamination issues, and decades of ecological restoration would be required to reverse over a century of timbering, mining, and invasive species’ intrusion. Other threats and degradation, such as the noise and safety impacts from the Air Force base and the destruction of archeological sites, would be impossible to reverse or mitigate.

**Size and Boundary Configuration**

The study area boundary described above, which is based upon the extent of significant resources (figures 2 and 3), would likely be adequate to ensure the protection and preservation of resources associated with the study—namely, a functioning, connected wildlife migration corridor and cultural landscape—if it were to be protected in its entirety. However, as described above in the “Land Ownership Patterns, Including Landowners’ Level of Support” and “Threats to Resources and Existing Degradation” sections, significant resource damage already exists in the study area, and the National Park Service is unlikely to be able to acquire much of the land within the boundary in a timely manner. If one were to subtract all developed and agriculturally degraded properties on the study area periphery, the three wildlife management areas, the lands managed by Bond Swamp National Wildlife Refuge, and the private lands that the study team has been able to confirm are unavailable for public acquisition, then the remaining “potential park” lands would be a collection of a few relatively small and geographically disparate areas.

A functioning wildlife migration corridor assumes continuity and connectivity that is relatively free from obstructions to wildlife movement. A functioning wildlife corridor also assumes quality wildlife habitat. As areas set aside and managed for their high-quality wildlife habitat, Bond Swamp and the three wildlife management areas are presumed to have the choicest wildlife habitat in the study area. These areas are already protected by state and federal managers. Without the private parcels, which are unlikely to be acquired between them, the disparate set of landholdings that the National Park Service would realistically be able to acquire would not meaningfully contribute towards a functioning wildlife migration corridor across the larger, nationally significant study area analyzed here.
The small, disparate areas would also not comprise an intact cultural landscape. The cultural resources and archeological resources that comprise the nationally significant cultural landscape described in chapter 3 are mostly contained within Bond Swamp and the three wildlife management areas. The disparate set of landholdings that the National Park Service would realistically be able to acquire would not include the quality cultural resources to comprise a cohesive, connected cultural landscape. However, they could contribute to this cultural landscape in the context of a partnership-based conservation model that would include private landowners and multiple federal, tribal, and state agencies, as described in chapter 6 below.

Overall, the designation of a national park unit would not be feasible under this factor. The boundary of the nationally significant study area (as described in chapter 3) is designed to protect two specific resources—a wildlife corridor and a cultural landscape. Eliminating the lands that the National Park Service is unlikely to acquire and the lands where the National Park Service is not currently the lead land manager, the remaining portion of the study area would be too small, too disparate, and contain lands of comparatively lower resource value such that it would no longer convey the study area’s overarching national significance or provide adequate resource protection.

### Economic and Socioeconomic Impacts

The economic benefits of national parks are well established as the National Park Service preserves unique resources for the enjoyment of future generations. Nationwide, visitors to National Park Service lands purchase goods and services in local gateway regions and these expenditures generate and support economic activity within those local economies. Such visitor spending is far-reaching, directly affecting sectors such as lodging, restaurants, retail, recreation industries, and transportation. The 2020 NPS Visitor Spending Effects Report analyzes and presents an estimated amount of annual dollars that visitors spend in gateway economies across all the country. The model uses information from visitor survey data, visitation data, and regional economic multipliers to generate estimates for visitor spending and economic contributions. The report showed park visitors spent an estimated $14.5 billion in local gateway regions while visiting NPS lands across the country in 2020. These expenditures supported an estimated 234,000 jobs, $9.7 billion in labor income, and $28.6 billion in economic output to the national economy.

In 2020, the State of Georgia welcomed a total of 6.7 million park visitors to its national parks, which resulted in an estimated $358 million in revenue to local gateway regions. These expenditures supported a total of 5,390 jobs, $175 million in labor income, and $514 million in economic output to the Georgia economy. The socioeconomic impact of a new unit of the national park system on the local area is uncertain but is projected to be modest. Social and economic impacts of NPS designation would vary, depending on the size and scope of the new park, management approach, staffing levels, and especially visitation. Any impacts would accumulate over time as a new unit becomes better established within the national park system. Socioeconomic impacts correlate directly with the number of visitors to a site. The Ocmulgee River corridor currently receives visitation and, therefore, already contributes some value added to the local economy. Consequently, unless visitation increases significantly, additional value added would likely be minimal should this site be designated as a unit of the national park system.
Designation of a new unit would likely result in some increased spending in local restaurants, hotels, and retail establishments, and these purchases would generate tax revenues. The economic impact of this visitor spending in small towns could be noticeable but may not be dramatic. Visitation would likely vary over the course of a year, and socioeconomic impacts would therefore be stronger during peak visitation.

An economic study commissioned by National Parks Conservation Association, *Diamond in the Rough*, evaluated the potential economic contributions to the regional economy of a potential new park unit. The report estimates potential annual visitation to be 1.37 million visitors per year under a potential NPS designation, generating $206.7 million in annual economic activity over a 15-year period. These expenditures are estimated to support 3,171 jobs, $86.7 million in labor income, and projects $33.5 million in tax revenue annually. The report projects increased visitor spending by people attracted to the potential site for outdoor recreation in activities, such as heritage tourism, bicycling, paddling, camping, fishing, wildlife watching, hiking, hunting, and horseback riding. The report anticipates that local communities would have increases to revenue for local restaurants, hotels, campgrounds and retailers.

If a new national park system unit were established, general visitation to the site would likely increase. To determine estimated visitation of the Ocmulgee River corridor under NPS management, visitation statistics were analyzed for two established NPS reference sites that shared similarities for recreation opportunities: Timucuan Ecological and Historic Preserve and Canaveral National Seashore. Over the most recent 10-period (2012–2021), Timucuan Ecological and Historic Preserve in Jacksonville, Florida, received, on average, 1.1 million visitors annually.

Over the most recent 10-period (2012–2021), Canaveral National Seashore in Titusville, Florida, received on average 1.5 million visitors annually. Potential visitation could range from about 1.1 million to 1.5 million visitors per year; however, those numbers are not representative of new visitation, as they include visitation already occurring within the study boundary. In addition to the comparable sites, Ocmulgee Mounds National Historical Park in Macon, Georgia, received an average of 130,000 visitors annually over the most recent 10-year period (2012–2021), which would likely contribute to total visitation received at a potential neighboring new park unit.

The Ocmulgee River corridor study boundary covers approximately 120,000 acres. Visitation could increase if the area were designated a national park unit. The public expressed interest in this area becoming a national park unit due to the combination of natural and cultural resources in close proximity to one another. The designation of a new park unit could likely attract a wide range of visitors wishing to participate in both recreation and interpretation. The study area is currently known for its vast hunting and fishing opportunities. Any changes to the hunting and fishing regulations or restrictions in specific areas would impact the future use of the area and associated economic contributions to the local communities.

In addition, the establishment of a new national park system unit would also involve the construction of some new visitor and administrative facilities. These construction activities would provide a modest and temporary economic benefit with worker spending or local jobs. However, facility construction would likely be minimal along the Ocmulgee River corridor in comparison to other national park system units. A new park would also require staff to operate facilities and care for the grounds.
Presumably, some employees could be sourced from the local area, though job creation would likely be minimal.

While the impact on the local economy is uncertain, socioeconomic factors would not preclude the designation of a new unit of the national park system. Designation of a national park unit would be feasible under this factor. Designation is not expected to result in significant negative economic impacts. Minimal impacts could occur, due to the change in existing land use to establish the site as a unit of the national park system. Although land uses would change, as mentioned above, visitation is expected to increase, likely generating a small economic benefit in accommodations, food services, and retail trade used by site visitors. The overall socioeconomic impact of designation to nearby communities would likely be slight.

Costs and Challenges Associated with Acquisition, Cleanup, Development, and Operations

The above analysis conclusively points to a negative finding under the feasibility criterion. Specifically, the findings under “Land Ownership Patterns, Including Landowners’ Level of Support,” “Size and Boundary Configuration,” and “Threats to Resources and Existing Degradation” demonstrate that designation of a national park system unit would not be feasible. Due to these findings, a detailed analysis of the specific costs to develop a national park system unit are not included here. However, the following discussion provides an analysis of the magnitude of costs required for acquiring lands in the study area and potentially remediating environmental liabilities and a comparative estimate for establishing park operations. Acquisition costs and logistics would be challenging and further contribute to the infeasibility of establishing a national park system unit in the study area.

Acquisition Costs

The study area comprises about 102,500 acres of natural and cultural resource lands, after excluding residential areas, active farms, and other intensively developed lands. Of this total, about 48,400 acres fall within the authorized acquisition boundaries of the following public or tribal protected areas: Bond Swamp National Wildlife Refuge, three State of Georgia wildlife management areas, and tribal land owned by the Muscogee (Creek) Nation. Lands within the boundaries of these federal, state, and tribal areas are excluded from this analysis as they would not be acquired for a new national park system unit. The remaining 54,100 acres are privately owned. The total assessed value of the private land is about $66 million, with another $1 million in assessed value of improvements. The total assessed value of the private properties is approximately $67 million.

According to publicly available data, county assessed value tends to be significantly less than actual market value. An analysis of the real estate transactions over the last three years involving lots/land in the study area indicates that the sale prices were generally between two and four times higher than the assessed value (Zillow 2022). If the median assessed value-to-sale price ratio of 3 to 1 is applied to the total assessed value, an estimated value of $208 million is reached. Analysis of the same 10 transactions also revealed that the average sale price of an acre in the study area is $3,200 and the median sale price of an acre is $2,700 (Zillow 2022). If the more conservative median sale price is applied to the 54,100 acres, an estimated market value of $146 million is reached. However, the price of an acre of land in the study area appears to be rising rapidly over the last three years (figure 4).
If the market value of an acre of land is currently closer to $6,000, as figure 4 suggests, an estimated market value of the private land would be $325 million. By averaging the estimates of these three methods, a reasonable estimate of the cost to acquire the private land in the study area is $226 million (table 5) in today’s dollars. Given the relatively small sample size of the available data and the margin for error associated with this rough analysis, a reasonable range of possible acquisition costs between $146 million and $325 million should be assumed.

Ultimately, costs for land acquisition would vary depending upon the final property boundary configuration, real estate market conditions, and the timing of acquisition (costs estimated above are based on current land values and market conditions, and these costs would likely increase in the future).

### Table 5. Comparison of Estimated Acquisition Costs Using Three Different Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Estimated Cost* to Acquire Private Lands in the Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Sale Price ($2,700) of 1 Acre Multiplied by Number of Private Acres in Study Area (54,100)</td>
<td>$146 M</td>
</tr>
<tr>
<td>Median Ratio of Sale Price to Assessed Value (3.1) Multiplied by Total Assessed Value ($67 M)</td>
<td>$208 M</td>
</tr>
<tr>
<td>Estimated Current Market Value of 1 Acre Based on Sales Trends ($6,000) Multiplied by Number of Private Acres in Study Area (54,100)</td>
<td>$325 M</td>
</tr>
<tr>
<td>Average of Three Methods</td>
<td>$226 M</td>
</tr>
</tbody>
</table>

*Figures are rounded for simplicity.
**Acquisition Challenges**

Regardless of the estimated cost to purchase real estate in the study area, the National Park Service would face a couple of practical challenges in acquiring land from willing sellers. The first issue is that potential sellers must be willing to wait for the lengthy government acquisition process, which may take over a year, much longer than the days or weeks that a property can be sold on the open market. A second issue is that potential sellers must be conceptually willing to sell their property and sell it to the federal government. While working through complex acquisition processes may be feasible for a handful of properties, the study area comprises 189 private parcels, 45 of which would need to be subdivided. Working through lengthy acquisition and subdivision processes with this many private landowners by ensuring they are willing to sell, willing to sell at appraised market value, and willing to wait for the process to work would be immensely challenging. However, direct management of an intact, unbroken area is essential for the preservation and conservation of the nationally significant boundary identified in chapter 3.

Some nongovernmental organizations are dedicated to acquiring land to eventually transfer to the National Park Service, and these organizations could help mitigate some of the challenges. However, it is unclear whether the Ocmulgee River corridor would be a priority for these groups, and they would likely have similar issues with the volume of parcels that need to be acquired. These groups’ efforts would (and should) likely be focused on existing inholdings within the Bond Swamp National Wildlife Refuge and Ocmulgee National Historical Park, as well as in partnership with the Georgia Department of Natural Resources.

Also challenging any acquisition effort is the pace of development and resource impacts occurring on the periphery of the study area, including solar farm development, agriculture, timbering, mining, and residential development (see “Threats to Resources and Existing Degradation”). Any effort to acquire lands within the study area would effectively be in a race with these other development pressures in the study area, which would likely outpace NPS acquisition efforts and would be too great by the time the National Park Service is able to make acquisitions.

**Environmental Cleanup Challenges and Costs**

If the National Park Service pursued acquisition of the study area, it would incur costs associated with assessing the presence of and the potential cleanup of environmental contamination. Pursuant to Departmental Manual Part 602 chapter 2, the National Park Service is required to conduct a pre-acquisition environmental site assessment prior to any land acquisition to determine the likely presence and extent of environmental liabilities. This policy is intended to minimize the agency’s exposure to environmental liabilities and potential response costs under the Comprehensive Environmental Response, Compensation and Liability Act, as amended (42 USC 9601, et seq.), the Oil Pollution Act, as amended (33 USC 2701, et seq.), and other federal and state authorities.

Typical costs to conduct a pre-acquisition environmental site assessment on individual sites within the study area would be approximately $15,000 per site. Given the size of the study area, there are likely several site assessments needed. In addition, preliminary assessments may determine that select sites will require additional investigation, which could cost $100,000 to $150,000 per site. These assessments may find that some sites require remediation and cleanup.
Given the history and current presence of timbering, mining, agriculture, paper manufacturing, military activity, railroads, and utility corridors in and around the study area, all sectors that are associated with a high potential for pollution and contamination, it is reasonable to presume that substantial cleanup costs may be incurred. Depending on a number of variables including site type and complexity, type of contaminant, size of site, and affected media, the costs of this cleanup may vary from roughly $50,000 for sites with lower complexity to over $1 million for sites of greater complexity.

It may be difficult for the National Park Service to fully conduct pre-acquisition environmental site assessments in the study area as they require permission from landowners to access and observe conditions on their properties. As noted above (see “Land Ownership Patterns, Including Landowners’ Level of Support” section), many landowners are generally opposed to establishment of a national park unit and may not be amenable to these assessments. If the National Park Service pursues acquisition without having conducted the necessary assessments, this could lead to uncertainty regarding the potential environmental liabilities the agency is incurring.

While it is impossible to accurately estimate the extent and associated cost of environmental cleanup without conducting several pre-acquisition environmental site assessments, given the size of the study area and the activities that have occurred within it, it is reasonable to assume the cost would exceed the $500,000 threshold that requires approval from the Assistant Secretary for Policy Management and Budget. A reasonable estimate of environmental cleanup costs would be between $5 million and $10 million, though it could be less or substantially more.

### Development Costs

Development costs of national park system additions vary widely, depending on existing conditions and facilities and the types of conditions and facilities desired. New national park system units and additions frequently require investment of time and money to inventory and document resources in the unit, develop management or treatment plans for those resources, develop educational and interpretive materials, and develop and improve facilities for visitors and park operations, including facilities that would meet legislative requirements for accessibility.

### Operations Costs

Since the National Park Service has a legislated mandate to conserve resources unimpaired for public enjoyment, it should be assumed that the park units it manages would continue indefinitely into the future. However, designation of a new unit of national park system does not automatically guarantee that funding or staffing to administer that new unit would be appropriated by Congress. Any newly designated national park unit would have to compete with the more than 400 existing park units for limited funding and resources within a current fiscally constrained environment.

Study areas like Ocmulgee that may be nationally significant and suitable for designation as a new park unit may not be feasible in light of current budget constraints, competing needs across the entire agency, and the existing NPS deferred maintenance backlog. This is especially true given the large and disparate nature of a potential Ocmulgee park unit. Based on an analysis of comparable units of the national park system, it is reasonable to expect that the ongoing operations budget of a park in the study area would be in the vicinity of $3 to $4 million annually (table 6).
While the estimated costs of operations associated with a park unit along the Ocmulgee would be comparable to other mid-sized units of the national park system disparately situated along bodies of water, any new expenditures would need to be carefully weighed in the context of the agency’s existing maintenance backlog and other fiscal constraints and in terms of potential future visitation.

Table 6. Operations Costs of Comparable Units

<table>
<thead>
<tr>
<th>Park Unit</th>
<th>Fiscal Year (FY) 2021 Enacted ONPS Budget*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocmulgee Mounds National Historical Park</td>
<td>$1,410,000</td>
</tr>
<tr>
<td>Canaveral National Seashore</td>
<td>$3,527,000</td>
</tr>
<tr>
<td>Timucuan Ecological and Historic Preserve</td>
<td>$2,897,000</td>
</tr>
<tr>
<td>Chattahoochee National Recreation Area</td>
<td>$3,752,000</td>
</tr>
<tr>
<td>Delaware Water Gap National Recreation Area</td>
<td>$10,486,000</td>
</tr>
<tr>
<td>Congaree National Park</td>
<td>$1,817,000</td>
</tr>
</tbody>
</table>

*Based on 2021 NPS Park and Program Table from the FY 2022 Green Book. ONPS – Operation of the National Park Service.

Conclusion

Designation of a national park unit would not be feasible under this factor due to the high costs of initial acquisition, practical challenges associated with that acquisition, and the expected costs associated with operation of a functional park unit of this size.

CONCLUSION: SUMMARY OF FEASIBILITY ANALYSIS

While the study area would be feasible under some factors considered under the analysis of feasibility such as “Level of Local and General Support” and “Economic and Socioeconomic Impacts,” it would not be feasible under the majority of the factors.

The complexity of the land ownership patterns, and some large landowners’ general opposition to a potential national park unit, would mean that a potential national park unit would comprise several disparate segments along the length of the corridor. These segments would be difficult to access and would add little in terms of protection of valuable resources within the study area or visitor opportunities for enjoyment of the corridor’s resources. The resources of the corridor, particularly those on lands the National Park Service could conceivably acquire, have been substantially degraded by industrial activities, including timbering and mining. Moreover, the costs to acquire this disparate set of lands would be in the range of $146 to $325 million, with the cost to develop and annually operate a functional park unit adding millions more to the overall cost. All this assumes the National Park Service would be able to acquire the lands, but technical challenges may prevent that from occurring.

Taken together, the infeasibility of a national park unit due to these factors is likely an insurmountable barrier to establishment. Therefore, this special resource study has reached a negative finding on the basis that the study area does not meet the feasibility criterion.

NEED FOR NPS MANAGEMENT

The need for NPS management is not fully analyzed in this special resource study due to the negative finding under the feasibility criterion. However, direct NPS management of the study area is likely not clearly superior to the current land management approaches. In fact, existing opportunities for the National Park Service to engage in partnership with the US Fish and Wildlife Service, Georgia Department of Natural Resources, Muscogee (Creek) Nation, and private landowners to advance conservation in the Ocmulgee River corridor would likely be superior to direct NPS management of the entire corridor.
Existing land managers, namely the US Fish and Wildlife and the Georgia Department of Natural Resources, currently protect many of the resources of interest in the study area. The US Fish and Wildlife Service conserves a total of 8,600 acres of land as Bond Swamp National Wildlife Refuge and could conserve up to 17,000 acres if it is able to acquire all lands within its authorized boundary. This is a sizeable piece of the study area that is already currently in, or available for, conservation; that is, opportunities already exist for the protection of cultural resources that contribute to the cultural landscape and wildlife habitat that contributes to the wildlife corridor. Also, designation as a national park system site would likely not improve the chances that the remaining 8,400 acres of the Bond Swamp acquisition boundary would be acquired and protected.

In addition to resource protection, the wildlife refuge also allows for visitor access for wildlife-dependent activities. While direct NPS management may improve visitor access by opening the area to nonwildlife-dependent activities and improving opportunities to learn about cultural resources, these marginal improvements would not make direct NPS management clearly superior.

The Georgia Department of Natural Resources currently conserves 28,000 acres within the study area as part of three wildlife management areas. Similar to Bond Swamp, these lands, which comprise an appreciable piece of the study area, are currently in conservation; that is, that cultural resources that contribute to the cultural landscape are protected, as is wildlife habitat that contributes to the wildlife corridor. The form of conservation on the wildlife management areas does differ from Bond Swamp in that it tends to be more proactive. For example, prescribed fire is used on the wildlife management areas, as are other forms of habitat restoration, while the wildlife refuge tends to be conserved more passively.

The wildlife management areas are also similar to the wildlife refuge in that they provide visitor access, though that visitor access tends to be predominantly in the form of hunting and fishing. While direct NPS management could augment visitor opportunities by encouraging more forms of visitor access that are not related to hunting and fishing and improving opportunities to learn about cultural resources, these marginal impacts would not make direct NPS management clearly superior.

Importantly, the existing national park system unit at Ocmulgee Mounds National Historical Park already fills many of the gaps in cultural resource interpretation and diversity of visitor opportunities left by the US Fish and Wildlife Service and Georgia Department of Natural Resources management. As stated in the park’s foundation document, “the purpose of Ocmulgee Mounds National Monument is to preserve, protect, study, and commemorate the site of more than 12,000 years of continuous human habitation by multiple cultures and peoples, and to study and interpret the interconnectedness of those cultures to the landscape of the Ocmulgee Old Fields.” Interpretive programs, exhibits, and artifacts educate visitors about the relationship of people to the land. The park is currently responsible for the preservation of extensive archeological resources in the area and offers programming and interpretation to visitors. In addition, the park includes diverse ecosystems supporting wildlife, including threatened and endangered species. In this way, the park already conserves some of the most significant cultural resources related to the cultural landscape evaluated in this special resource study. The recently expanded park also contributes to protection of the wildlife corridor evaluated in this study, and when fully realized, will link directly to the northern boundary of Bond Swamp National Wildlife Refuge.
While the park is outside the study area boundary, it is immediately adjacent to it. Given this existing foothold in the Ocmulgee River corridor, there is an opportunity for the National Park Service to engage in partnership with other land managers, the Muscogee (Creek) Nation, and private landowners to further conserve the nationally significant resources evaluated in the study. Potential models for how this partnership conservation might look are discussed in chapter 6.

While challenges to the perpetual protection of the nationally significant resources of the Ocmulgee River corridor exist (primarily related to development and extractive land uses), it is not demonstrated that expanded NPS management of the corridor would prove superior to the corridor’s current management. The existing constellation of land management is adequate to protect the resources. All three land managing agencies—the US Fish and Wildlife Service, the Georgia Department of Natural Resources, and the National Park Service—strictly protect the cultural resources on their lands. The US Fish and Wildlife Service and Georgia Department of Natural Resources provide outstanding fish and wildlife-related recreational opportunities, as well as some other visitor experiences, while the National Park Service provides a focus on cultural resource interpretation. Direct NPS management of all of these lands would be unlikely to improve resource protection or the diversity of visitor opportunities in any substantial way. As such, direct NPS management is not clearly superior to existing management. In fact, a partnership approach to conservation, as is explored in chapter 6, would likely be superior to direct NPS management of the entire study area. Therefore, while the need for NPS management criterion was not evaluated in full, it is likely that the study area would not meet it, and a negative finding based on lack of need for NPS management would be appropriate.

### Direct NPS Management

This study has concluded that the Ocmulgee River corridor study area does not meet all of the established criteria for new national park system units. However, the designation of a new national park unit is ultimately the purview of Congress and/or the president. This section presents scenarios for direct NPS management that may be available if the Ocmulgee River corridor study area were to be designated as a new unit of the national park system. Under these scenarios, the National Park Service would take a larger role in day-to-day management tasks and staffing at a site than it would in the National Park Service-administered scenarios or partnership-based conservation models presented in chapter 6.

While the Muscogee (Creek) Nation supports the partnership-based conservation models described in chapter 6, tribal representatives did express appreciation for federal management by the National Park Service where it exists because sections 110 and 106 of the National Historic Preservation Act encourages/mandates resource inventories and consultation with the tribe. That is to say, the tribe supports federal ownership because it means that they have a seat at the table. Under NPS management, the tribe knows that they will be apprised of damage to resources, they will be consulted on management decisions, and Native American Graves and Repatriation Act-related findings will be handled appropriately. With this in mind, the tribe would support direct NPS management and would be interested in exploring co-management models with the National Park Service, such as those that exist under legislation at Canyon de Chelly National Monument, Glacier Bay National Park, Grand Portage National Monument, and Big Cypress National Preserve.
The tribe may also be interested in exploring collaboration or cooperative agreements with the National Park Service under direct NPS management scenarios. The majority of NPS working relationships with tribal nations are collaborative or cooperative opportunities rather than co-management and are supported through official agreements, often with accompanying tribal council resolutions. The National Park Service has approximately 80 agreements of this type in place, and that number is expected to increase.

### Boundary Adjustment to Existing Unit of the National Park System

Proposed boundary adjustments to existing units of the national park system must meet the criteria contained in section 3.5 of NPS Management Policies 2006. Land considered for a boundary adjustment must meet at least one of the following three criteria: protect significant resources and values or enhance opportunities for public enjoyment related to park purposes; address operational and management issues; or otherwise protect park resources that are critical to fulfilling park purposes. When conducting a special resource study, the National Park Service may consider adjusting the boundary of an existing park in lieu of creating a new national park system unit when expanding the existing park would be a viable management framework for protecting the study area. Resources in a potential boundary adjustment do not have to meet the national significance criterion; rather, they must be shown to be directly related to the purposes of an existing park. Typically, boundary adjustment studies are requested by Congress, but they are sometimes considered in special resource studies as a management alternative.

As stated above, the Ocmulgee River corridor does meet the national significance criterion. The study area’s cultural landscape is directly associated with the purpose of Ocmulgee Mounds National Historical Park.

Ocmulgee Mounds National Historical Park, located at the northern end of the study area, is the closest unit of the national park system to the Ocmulgee River corridor study area. It was established in 1926 to preserve an area with 12,000 years of continuous human habitation by multiple cultures and peoples and to study and interpret the interconnectedness of those cultures to the landscape of the Ocmulgee Old Fields. The resources of the Ocmulgee River corridor study area are directly tied to the Ocmulgee Old Fields and related resources. Therefore, the study area supports the legislated purpose of Ocmulgee Mounds National Historical Park.

Tribal nations support the expansion of Ocmulgee Mounds National Historical Park to form an 80,000-acre national park and preserve in the study area corridor. If Congress were to add the Ocmulgee River corridor study area to the national historical park through a boundary adjustment, the act would require a substantial revision to Ocmulgee Mounds National Historical Park’s enabling legislation in terms of the park’s legislated boundaries, as well as legislated co-management with tribal nations. However, this approach would be substantially similar to establishing a new park unit, and the types of feasibility challenges described in chapter 5 would still apply, with the extent of these challenges varying depending on the size and scope of the expansion under consideration.

### National Park Service-Led Collaboratively Managed Area (Partnership Park)

A collaborative framework or partnership park model led by the National Park Service is another option that may be available to special resource study areas. In this model, the National Park Service would operate in partnership with others and have the lead in specific areas, such as interpretation.
and technical assistance, but would share ownership and management responsibilities of the land and resources located within the unit’s legislated boundaries. This management model requires one or more federal or nonfederal management entities with substantial ownership and commitments to continuing resource protection and providing visitor enjoyment. Co-stewardship by tribes is also a possibility under this model, particularly in cases where tribes own lands in the partnership park. A park boundary could be established by Congress, but existing public lands within it would not be acquired for direct management by the National Park Service. Instead, partnership arrangements among federal and state agencies, local governments, and nonprofit organizations would achieve the conservation, recreational, and educational goals of the unit.

This model has been used in cases where it is not feasible for the National Park Service to own and manage an area entirely on its own. Santa Monica Mountains National Recreation Area, which has been working cooperatively with agencies and organizations to protect resources of the Santa Monica Mountains for over three decades, is a model for partnership management. The partnerships offer many lessons learned and excellent cooperative management models. The Golden Gate National Recreation Area in the San Francisco Bay area provides another model of partnership management.

Land within the study area corridor has a mixture of federal (US Fish and Wildlife Service), state (Georgia Department of Natural Resources), and private ownership. The US Fish and Wildlife Service and the Georgia Department of Natural Resources are responsible for visitor opportunities currently available within the corridor. If Congress were to consider establishing the Ocmulgee River corridor study area as a partnership park, potential partners would need to demonstrate the capacity for long-term involvement at the site and the ability to provide considerable financial support for resource protection and visitor opportunities. Managing partners would also need to seek remedies for existing and threatened incompatible development on private lands between the public lands managed by the State of Georgia and the federal government.

The concept of a National Park Service-led partnership park could be more feasible if smaller areas of the corridor were considered for designation from lands managed or owned by willing participants. However, the mission of providing public access and resource protection to the nationally significant cultural landscape and habitat corridor described in chapter 3, and as envisioned by the study’s enabling legislation, would not be realized in this smaller area.
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Chapter 6: Conservation Options

This special resource study finds that the Ocmulgee River corridor study area does not meet the criteria to be recommended for designation as a new unit of the national park system, but there are several opportunities for the National Park Service to participate in and advance conservation goals in the study area. This section evaluates those opportunities and presents them as potential options. Generally, these options fall into one of two categories that vary in the level of NPS involvement; partnership models that include the National Park Service as a member/participant, and models that involve NPS administered partnerships.

**PARTNERSHIP-BASED CONSERVATION**

During conversations related to the feasibility of direct NPS management, staff from the US Fish and Wildlife Service and the Georgia Department of Natural Resources presented alternative partnership-based conservation models that have worked well in the region. The US Fish and Wildlife Service and the Georgia Department of Natural Resources were generally more supportive of these partnership models than direct NPS management.

Under these models, existing land managers and private landowners would work together to further resource conservation in the corridor as authorized by law. Based on this local preference and the study team’s general understanding of the study area, the National Park Service finds that a partnership approach is ideal in which multiple federal, tribal, state, regional, local, and private landowners jointly work together for conservation of the Ocmulgee River corridor. This is likely to be the most efficient and effective method for protecting significant resources and providing for public enjoyment. This section describes partnership models suggested by the US Fish and Wildlife Service and the Georgia Department of Natural Resources, including the Altamaha River Partnership and the ACE Basin Task Force Project. These models are presented as possible examples that could be followed in the Ocmulgee River corridor. This section also describes how the Muscogee (Creek) Nation could be involved in partnership-based conservation.
**Altamaha River Partnership**

The Altamaha River is a 137-mile river that begins at the confluence of the Ocmulgee and Oconee Rivers near Hazelhurst, Georgia, and flows to the Atlantic Ocean in Darien, Georgia. This area is abundant in cultural and natural resources, providing a history of people living in the landscape and critical habitat for wildlife species. The river corridor provides visitor opportunities similar to the Ocmulgee River corridor such as hunting, fishing, and boating. The area has abundant habitat such as bottomland hardwood forests, cypress swamps, and tidal marshes, as well as significant cultural areas.

The idea of building a partnership conservation corridor began with a small group of individuals, the Georgia Department of Natural Resources, and the Nature Conservancy in 1998. The idea was to acquire all the land from along the river from Wolf Island to Jessup. The State of Georgia designated it a conservation priority and has acquired 120,000 acres and secured them for conservation, with assistance from multiple partners. Today, the Georgia Department of Natural Resources considers the efforts to conserve the lower Altamaha a major success story.

The Altamaha River Partnership is composed of representatives from the counties that border the river: several nongovernmental organizations, including the Nature Conservancy, McIntosh County S.E.E.D., Altamaha Riverkeeper, and the Georgia Nature Based Tourism Association; business representatives; and several state and federal agencies. According to the partnership’s website, the “Altamaha River Partnership, Inc. is organized, and shall be operated primarily for the following purposes: 1) to increase nature-based tourism and create jobs in the counties adjoining the Altamaha River..., 2) to market the river corridor as a tourist destination, 3) to upgrade tourist facilities along the river to better service Altamaha River-based recreational activities, and 4) to educate the general public along the river, its natural features, and environmental threats to it” (Altamaha River Partnership 2022).

**ACE Basin Task Force Project**

The ACE Basin Task Force Project in South Carolina is approximately 350,000 acres of pine and hardwood uplands, forested wetlands, marshes, barrier islands, and beaches. The ACE Basin model provides another example of a joint effort between federal and state government agencies, private conservation groups, and local landowners to preserve and protect natural resources. The Ashepoo, Combahee, and Edisto Rivers, which give the basin its name, combine to create one of the largest undeveloped estuaries on the Atlantic Coast. A majority of the land is in private ownership. The partnership group was formed in 1988 with a mission to “maintain the natural character of the basin by promoting wise resource management on private lands and protecting strategic tracts by conservation agencies. A major goal of the protection efforts is to ensure that traditional uses such as farming, forestry, recreational and commercial fishing and hunting will continue in the area.”

Members of the group provide each other with technical and logistical support in all phases of the project. Private landowners are provided with technical assistance in wildlife habitat management by project representatives. All management entities work for the protection of the resources, while allowing for traditional land uses such as timber management, agriculture, hunting, and commercial and recreational fishing. These areas provide public access for recreation, including hunting and fishing.
According to USFWS staff at Bond Swamp National Wildlife Refuge, there are several advantages to the ACE Basin model. The first advantage is that each landowner or manager within the corridor is responsible for managing its own land; nobody gives up any ownership rights or management control. This makes the arrangement politically viable and relatively easy to set up as compared to establishment of a new national park unit. Once the arrangement is determined, the group determines a set of shared conservation goals. All parties contribute to achievement of these goals, which can relate to anything from waterfowl habitat to rice plantation preservation. The key is that federal, state, and local agencies all “buy-in” to the concept, along with nongovernmental organizations and private landowners. Once consensus is achieved, the different entities can leverage each other’s fund sources, expertise, staff time, and other resources to protect natural and cultural landscapes.

An important point about the ACE Basin model is that no one entity or agency is the lead convener of the organization. This level playing field acknowledges and takes advantage of the fact that different land managers have different strengths. This approach allows each land manager to provide conservation and visitor experiences that are different from and complementary to the other land managers. The lack of a lead convener contributes to a successful partnership in that it contributes to an organic “bottom-up” approach instead of a “top-down” approach.

The US Fish and Wildlife Service staff indicated that an approach similar to the ACE Basin model would work well in the Ocmulgee area and that they would be willing to play a role in such a partnership. This would allow National Park Service, the US Fish and Wildlife Service, the Georgia Department of Natural Resources, Muscogee (Creek) Nation, and others to be partners in conservation.

The National Park Service could contribute expertise in interpretation and other fields but would be one of several equal partners.

**Muscogee (Creek) Nation Participation in Partnership-Based Conservation**

The Muscogee (Creek) Nation has passed a tribal resolution supporting expansion of Ocmulgee Mounds National Historical Park to create a new Ocmulgee National Park and Preserve. It has also expressed a desire to participate in multiagency co-management of this new park unit. In conversation and correspondence with the National Park Service, the Muscogee (Creek) Nation has likewise expressed support for conservation and responsible resource management through partnership, regardless of landownership. The tribe would like to work with the National Park Service, the US Fish and Wildlife Service, and the Georgia Department of Natural Resources to protect resources in the area. Within a partnership-based conservation model, the tribe would prefer a formal agreement that outlines responsibilities of each partner. These agreements would support the Department of the Interior’s efforts under Joint Secretarial Order 3403 – “on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters,” which prescribes the use of collaborative agreements in land management plans and the use of agreements as a tool to foster cooperation on protection of treaty, subsistence, and religious rights.

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5. The National Park Service consults with 13 federally recognized tribes associated with the study area. The study team is indebted to the Muscogee (Creek) Nation for their guidance, recommendations, assistance, and comments submitted during the development of this study. However, references to partnership opportunities and alternative management options could and would apply to other native nations as well.
In terms of its responsibilities under these agreements, the tribe would like to collaborate beyond basic consultation and instead be involved in more aspects of internal management, including weighing in on management practices and recommending strategies for protection and management of cultural resources. According to the tribe’s letter to the National Park Service, “Cultural resources are nonrenewable resources that can only be identified by our Tribe and that have religious and cultural significance to our people.”

In a partnership arrangement with the National Park Service, the Georgia Department of Natural Resources, and USFWS managers, the Muscogee (Creek) Nation specifically envisions helping to fill the gap of interpretation of the cultural significance of the area. Tribal representatives noted that they already have productive working relationships with these agencies, though they noted that these relationships would have to grow to achieve conservation goals while supporting the priorities of current land managers. Furthermore, concern over the loss of resources to development on private lands is of concern to the Muscogee (Creek) Nation, though respect for private property rights is also a priority. A partnership model that encourages buy-in and conservation participation by private landowners would be a model future for the corridor.

**Conclusion**

The National Park Service, through Ocmulgee Mounds National Historical Park, could provide additional conservation and preservation of resources in a joint partnership approach in which the collective land managers have the same goals and each manage in an effective manner to meet a shared vision. The NPS study team received feedback from federal and state land managers that a partnership model would be familiar to land managers in the state of Georgia and would be preferable to a new national park unit. While tribal representatives support federal management and the more stringent federal protections for cultural sites and consultation processes that come with it, they also support a partnership with an emphasis on clear responsibilities. The Department of Defense may also be willing to participate in a conservation partnership through its Readiness and Environmental Protection Integration Program. A partnership approach would be cost effective and provide an ability to leverage existing resources and expertise, providing a collective stewardship of the river corridor into the future in a more sustainable way with multiple entities.

## NATIONAL PARK SERVICE-ADMINISTERED PROGRAMS

National Park Service-administered programs such as National Heritage Areas, National Natural Landmarks, National Historic Landmarks, and National Wild and Scenic Rivers ensure the nation’s heritage is conserved, protected, and managed for this and future generations. These programs offer recognition, technical assistance, and grant opportunities for resources that are not necessarily owned by the National Park Service or directly managed as a unit of the national park system. Pursuit of these statuses could provide added recognition (as well as funding and further local support for protection) of the area’s importance to the nation without requiring or implying management by the National Park Service.

## National Heritage Area

The Ocmulgee River corridor is not currently a part of a National Heritage Area (NHA). National Heritage Areas are designated by Congress as places where natural, cultural, and historic resources combine to form a cohesive, nationally important landscape.
The 55 National Heritage Areas across the country are a key component of the national system of parks. National Heritage Areas are a grassroots, community-driven approach to heritage conservation and economic development. They further the mission of the National Park Service by fostering community stewardship at a large landscape scale. National Heritage Areas are not national park units, and the National Park Service does not assume ownership of land inside heritage areas or impose land use controls. Private property rights are unaffected by the designation of a National Heritage Area. Instead, the National Park Service partners with, provides technical assistance to, and distributes matching federal funds from Congress to NHA organizations, known as coordinating entities. In this way, management and decision-making for National Heritage Areas remain with local landowners, and managers and advancement of NHA goals lies with the local coordinating entity, rather than with the National Park Service.

Given the abundance of natural, cultural, and historical resources located in the Ocmulgee River corridor, which include not only Ocmulgee Mounds National Historical Park and Ocmulgee Old Fields traditional cultural property but also Bond Swamp National Wildlife Refuge, Echeconnee Creek Wildlife Management Area, Ocmulgee Wildlife Management Area and Public Fishing Area, Oaky Woods Wildlife Management Area, and other attractions, pursuit of a National Heritage Area designation may be appropriate. If desired, the Muscogee (Creek) Nation, or a board that includes the tribe, could operate as the coordinating entity for a National Heritage Area.

Several National Heritage Areas across the country tell tribal stories, including the Upper Housatonic Valley National Heritage Area (Connecticut, Massachusetts), Northern Rio Grande National Heritage Area (New Mexico), Muscle Shoals National Heritage Area (Alabama), Sangre de Cristo National Heritage Area (Colorado), and Northern Plains National Heritage Area (North Dakota). The Northern Plains National Heritage Area celebrates the important natural, cultural, and historic sites tied to the Missouri River in central North Dakota. The National Heritage Area tells “the interconnected stories of Native Americans, explorers and settlers, and farmers and ranchers on the Northern Plains that are historically significant and contribute to our nation’s diverse heritage.” The Northern Plains Heritage Foundation is the coordinating entity for the National Heritage Area. The Board of Directors for the National Heritage Area includes tribal citizens and has ex-officio members who represent the North Dakota Parks and Recreation Department and Knife River Indian Villages National Historic Site. The superintendent of this national park system unit serves as an ex-officio board member due to the National Heritage Area’s strong connection to this unit and the history of Northern Plains Indians.

A successful national heritage area could provide funding and support for archeological stewardship programs, resource protection projects, and efforts to support the interpretation of the wider landscape. A National Heritage Area could also include private landowners who are interested in participating voluntarily. Such voluntary participation could come with grant opportunities for conservation or interpretation of heritage resources on private lands.

Further exploration of the Ocmulgee River corridor as a National Heritage Area could be pursued through consultation with the NPS Southeast Region NHA coordinator and the NPS NHA program in Washington, DC. The NHA feasibility study could be prepared by community members, a consultant, or the National Park Service (through a congressionally authorized study).
This investigation would entail a preliminary evaluation of the four general categories of NHA program criteria to determine whether (1) the landscape has an assemblage of natural, cultural, historic, and scenic resources that, when linked together, tell a nationally important story; (2) opportunities exist for increasing public access to and understanding of contributing natural, cultural, and historic resources; (3) an organization exists that has the financial and organizational capacity to coordinate heritage area activities; and (4) support for NHA designation exists within the region. A 2004 NHA feasibility study looked at land along the Ocmulgee River from Old Water Works north of Macon to Bond Swamp National Wildlife Refuge to the south (Mastran et al. 2004). The preliminary evaluation determined that that area met the four general categories of NHA program criteria. This study could be revisited to incorporate the rest of the study area.

National Natural Landmark

National Natural Landmarks (NNLs) are designated by the Secretary of the Interior as places that contain significant examples of the nation’s biological and/or geological features. The Ocmulgee River corridor does not currently have any National Natural Landmarks. The more than 600 National Natural Landmarks across the country represent the best examples of a specific type of biological community or geological feature in the site’s biophysiographic province. The National Natural Landmark program furthers the mission of the National Park Service by encouraging the preservation of sites illustrating the geological and ecological character of the United States, to enhance the scientific and educational value of sites thus preserved, to strengthen public appreciation of natural history, and to foster a greater concern for the conservation of the nation’s natural heritage.

Given the significance of the blackland prairie and the wildlife habitat corridor, pursuit of an NNL designation may be appropriate. Further exploration could be pursued with the NPS Southeast Region NNL coordinator and the NPS NNL program in Washington, DC. The NNL evaluation report could be prepared by community members or a consultant. This report would entail an evaluation to determine if the site is one of the “best” examples of a type of biological community or geological feature in its biophysiographic province, determined primarily on illustrative value and condition of the resource. Once it has been determined that a proposed area meets these standards, designation by the Secretary of the Interior is needed to recognize official National Natural Landmark status. National Natural Landmark status would create new opportunities for NNL program staff to assist landowners with conservation or interpretation of the site’s resources through project planning, obtaining grants, securing technical assistance, and writing letters in support of protecting the NNL resources if they are threatened.

National Historic Landmark

National Historic Landmarks (NHLs) are historic properties that illustrate the heritage of the United States. The more than 2,600 National Historic Landmarks found in the United States today include historic buildings, sites, structures, objects, and districts. Each National Historic Landmark represents an outstanding aspect of American history and culture. There are no designated National Historic Landmarks in the Ocmulgee River corridor currently. The NHL program uses the skills of NPS staff to guide the nomination process for new landmarks.
Working with citizens across the nation, the NHL program also assists existing landmarks. Designation of National Historic Landmarks helps recognize, preserve, and protect important locations in American history. Designating a property as a National Historic Landmark may provide it with additional protections from development and could make the property eligible for preservation grants and technical preservation assistance. Most National Historic Landmarks are privately owned and are governed by local preservation laws. The National Park Service does not assume ownership or management of all National Historic Landmarks, though some historic landmarks exist within national park system units and are owned and managed by the National Park Service.

Eligibility for the NHL designation requires that a property retain a high degree of integrity and meet one of six NHL criteria: be the location of an event that had a significant impact on American history overall; be the property most strongly associated with a nationally significant figure in American history; provide an outstanding illustration of a broad theme or trend in American history overall; be an outstanding example of an architectural style or significant development in engineering; be part of a group of resources that together form a historic district; be a property that can provide nationally significant archeological information.

Given the significance of the Ocmulgee Old Fields traditional cultural property and surrounding potential cultural and archeological district, pursuit of an NHL designation may be appropriate. Further exploration could be pursued with the NPS Southeast Region NHL coordinator and the NPS NHL program in Washington, DC.

The NHL nomination process includes writing a letter of inquiry to the National Park Service, preparing an NHL nomination, review of the nomination from experts and scholars, review by the landmarks committee and the National Park System Advisory Board, a recommendation to the Secretary of the Interior, and a final determination by the Secretary. The NPS NHL program review of this special resource study national significance evaluation (see appendix D) can inform preparation of a letter of inquiry.

## Wild and Scenic River

The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Wild and Scenic Rivers Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. The act encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Designation neither prohibits development nor gives the federal government control over private property. Recreation, agricultural practices, residential development, and other uses may continue. Protection of the river is provided through voluntary stewardship by landowners and river users and through regulation and programs of federal, state, local, or tribal governments.

Rivers may come into the National Wild and Scenic Rivers System either by congressional designation or by state nomination to the Secretary of the Interior. In the case of congressionally designated rivers, Congress may first direct in legislation, by amending section 5(a) of the Wild and Scenic Rivers Act, that a study be conducted to determine whether the river area is eligible and suitable for wild and scenic designation.
Congress designates new rivers under section 3(a) of the act. Congress generally specifies in the designating legislation that either the Secretary of Agriculture or the Secretary of the Interior administer the designated river. Congress has specified in some wild and scenic river designations that rivers are to be administered by the Secretary of the Interior through the National Park Service in partnership with state and local governments, tribes, councils, watershed groups, and nongovernmental organizations, generally using cooperative agreements and where no federal land is acquired for the purposes of river protection. Rivers on nonfederal land also may be designated through an administrative process, wherein states may apply to the Secretary of the Interior for inclusion of a state-protected river (i.e., the river must first be designated as a component of a state’s river protection system).

To be eligible for designation, a river must be free flowing and possess one or more outstandingly remarkable values (ORVs). The Ocmulgee River appears to be free of major impoundments throughout the study area and beyond, including 242 river miles from Macon to the Atlantic Ocean, making it one of the longest undammed, free-flowing river segments in the eastern United States. Further, the Ocmulgee River from Macon to its confluence with the Altamaha River is currently listed on the Nationwide Rivers Inventory as a potential candidate for inclusion in the National Wild and Scenic River System. The Nationwide Rivers Inventory identifies “cultural,” “fish,” “geologic,” “historic,” “recreational,” “scenic,” and “wildlife” as ORVs found throughout the study area.

Therefore, the Ocmulgee River, within the study area, is potentially eligible for designation as a wild and scenic river. This special resource study identifies many river-related outstanding resources, like those identified on the Nationwide Rivers Inventory.

The second component of a wild and scenic river study is an evaluation of the river’s suitability, including an assessment of the public’s desire to designate the river. Wild and scenic river suitability has not been evaluated under this special resource study. Further assessment would be needed, including an evaluation of potential wild and scenic river management models and scenarios (e.g., partnerships). Further exploration of study or the designation process could be pursued through consultation with the NPS Southeast Region wild and scenic river program coordinator, or Congress could authorize a study of wild and scenic river eligibility and suitability.

**Conclusion**

Proponents of conservation in the Ocmulgee River corridor could pursue any and all of the National Park Service-administered programs described above and could also pursue support from any of the vast NPS community assistance programs such as the Rivers, Trails, and Conservation Assistance program; Healthy Parks Healthy People; or the Olmsted Center for Landscape Preservation. More information on these community assistance programs can be found at https://www.nps.gov/getinvolved/community-assistance.htm.
Chapter 7: Conclusion

Based on the analysis performed through this special resource study, the National Park Service concludes that the Ocmulgee River corridor study area does not meet all of the established criteria for new national park system units.

National Significance—The Ocmulgee River corridor study area possesses natural and cultural resources that are nationally significant. The study area meets this criterion for inclusion in the national park system.

Suitability—The Ocmulgee River corridor represents cultural and natural resources that are not already adequately represented in the national park system or protected for public enjoyment by another federal, state, local, nonprofit, or private entity. The study area meets this criterion for inclusion in the national park system.

Feasibility—The Ocmulgee River corridor includes a large number of private property parcels and public lands. Although some members of the public and Native American tribes support the creation of a national park and preserve, in general, several private landowners and public land managers do not.

Many challenges are associated with potential acquisition of private property in the study area and there are existing and expanding threats to the resources of the study area (primarily in the form of development, agricultural and mining activities, and timbering—some of which have resulted in likely environmental liabilities). For these reasons and others, the study area does not meet the feasibility criterion for consideration as a unit of the national park system.

Need for Direct NPS Management—Because the study area did not meet the feasibility criteria, need for NPS management was not fully analyzed, and management alternatives were not developed. Furthermore, management by the National Park Service does not appear to be the most efficient or necessary strategy for the river corridor. Major portions of the study area are already managed for public use and conservation by the US Fish and Wildlife Service and the Georgia Department of Natural Resources. In addition, the National Park Service is already present on the north end of the river corridor at Ocmulgee Mounds National Historical Park.
Agencies have existing opportunities to cooperate with each other and with private landowners in the corridor to expand conservation and public enjoyment of the resources of the study area. Therefore, the study area does not appear to meet this criterion for inclusion in the national park system.

Other Options for Conservation—A suggested alternative for potential management of the Ocmulgee River corridor is through partnership-based conservation. The National Park Service, through Ocmulgee Mounds National Historical Park, could provide additional conservation and interpretation of resources in a joint partnership approach in which the collective land managers, including the Muscogee (Creek) Nation, have the same goals and each manage in an effective manner to meet a shared vision. A partnership approach would be cost effective and enable existing resources to be leveraged to provide a collective stewardship of the river corridor in a more sustainable way. An approach that leverages partnerships could also be employed to address the interest of some stakeholders to consider a reduced area within the larger study area as a way to provide additional partner support and resources to mitigate many of the concerns that led to a negative finding for the feasibility criterion in this study.

In addition to partnership management, pursuit of National Heritage Area, National Historic Landmark, National Natural Landmark, and/or National Wild and Scenic River status would provide added recognition (and potentially support for conservation) of the area’s importance to the nation. These programs can offer recognition, technical assistance, and grant opportunities for resources not owned by the National Park Service or directly managed as a unit of the national park system.

Consideration of a NHA designation through a feasibility study could be a particularly useful tool in the conservation and management needs of the river corridor. National Heritage Areas can provide financial and technical assistance to public and private landowners, potentially incentivizing conservation efforts. If desired, the Muscogee (Creek) Nation (or other tribes) could serve as a coordinating entity for a National Heritage Area or as a member of its governing board. National Heritage Area feasibility studies apply a different set of criteria than special resource studies, and conducting one would require additional analysis and public comment. However, reliance on information presented in this report could reduce the cost and time needed to complete such an evaluation.

SUMMARY

The Ocmulgee River corridor study area meets established criteria for national significance and suitability, but it does not currently appear to be a feasible addition to the national park system. Opportunities to protect and provide access to the significant resources of the corridor exist via partnerships among current land managers (including the National Park Service), and there is no demonstrated need for direct NPS management. Therefore, this special resource study finds that the Ocmulgee River corridor study area does not meet all of the criteria necessary to be considered eligible for designation as a new unit of the national park system.
Appendix A: Legislation for the Ocmulgee River Corridor Special Resource Study Public Law (PL116-9)

SEC. 2102. OCMULGEE MOUNDS NATIONAL HISTORICAL PARK BOUNDARY.

a) Definitions.—In this section:

1) HISTORICAL PARK.—The term “Historical Park” means the Ocmulgee Mounds National Historical Park in the State of Georgia, as redesignated by subsection(b)(1)(A).


3) STUDY AREA.—The term “study area” means the Ocmulgee River corridor between the cities of Macon, Georgia, and Hawkinsville, Georgia.

b) Ocmulgee Mounds National Historical Park.—

1) REDESIGNATION.—

A) IN GENERAL.—The Ocmulgee National Monument, established pursuant to the Act of June 14, 1934 (48 Stat. 958, chapter 519), shall be known and designated as the “Ocmulgee Mounds National Historical Park”.

B) REFERENCES.—Any reference in a law, map, regulation, document, paper, or other record of the United States to the “Ocmulgee National Monument” shall be deemed to be a reference to the “Ocmulgee Mounds National Historical Park”.

2) BOUNDARY ADJUSTMENT.—

A) IN GENERAL.—The boundary of the Historical Park is revised to include approximately 2,100 acres of land, as generally depicted on the map.

B) AVAILABILITY OF MAP.—The map shall be on file and available for public inspection in the appropriate offices of the National Park Service.

3) LAND ACQUISITION.—

A) IN GENERAL.—The Secretary may acquire land and interests in land within the boundaries of the Historical Park by donation, purchase from a willing seller with donated or appropriated funds, or exchange.

B) LIMITATION.—The Secretary may not acquire by condemnation any land or interest in land within the boundaries of the Historical Park.
4) ADMINISTRATION.—The Secretary shall administer any land acquired under paragraph (3) as part of the Historical Park in accordance with applicable laws (including regulations).

c) Ocmulgee River Corridor Special Resource Study.—

1) IN GENERAL.—The Secretary shall conduct a special resource study of the study area.

2) CONTENTS.—In conducting the study under paragraph (1), the Secretary shall—

A) evaluate the national significance of the study area;

B) determine the suitability and feasibility of designating the study area as a unit of the National Park System;

C) consider other alternatives for preservation, protection, and interpretation of the study area by the Federal Government, State or local government entities, or private and nonprofit organizations;

D) consult with interested Federal agencies, State or local governmental entities, private and nonprofit organizations, or any other interested individuals; and

E) identify cost estimates for any Federal acquisition, development, interpretation, operation, and maintenance associated with the alternatives.

3) APPLICABLE LAW.—The study required under paragraph (1) shall be conducted in accordance with section 100507 of title 54, United States Code.

4) REPORT.—Not later than 3 years after the date on which funds are first made available to carry out the study under paragraph (1), the Secretary shall submit to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report that describes—

A) the results of the study; and

B) any conclusions and recommendations of the Secretary.
Appendix B: NPS Management Policies Criteria for Inclusion

1.3 CRITERIA FOR INCLUSION

Congress declared in the National Park System General Authorities Act of 1970 that areas comprising the national park system are cumulative expressions of a single national heritage. Potential additions to the national park system should therefore contribute in their own special way to a system that fully represents the broad spectrum of natural and cultural resources that characterize our nation. The National Park Service is responsible for conducting professional studies of potential additions to the national park system when specifically authorized by an act of Congress, and for making recommendations to the Secretary of the Interior, the President, and Congress. Several laws outline criteria for units of the national park system and for additions to the National Wild and Scenic Rivers System and the National Trails System.

To receive a favorable recommendation from the Service, a proposed addition to the national park system must (1) possess nationally significant natural or cultural resources, (2) be a suitable addition to the system, (3) be a feasible addition to the system, and (4) require direct NPS management instead of protection by other public agencies or the private sector. These criteria are designed to ensure that the national park system includes only the most outstanding examples of the nation’s natural and cultural resources. These criteria also recognize that there are other management alternatives for preserving the nation’s outstanding resources.

1.3.1 National Significance

National Park Service professionals, in consultation with subject-matter experts, scholars, and scientists, will determine whether a resource is nationally significant. An area will be considered nationally significant if it meets all of the following criteria:

- It is an outstanding example of a particular type of resource.
- It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation’s heritage.
- It offers superlative opportunities for public enjoyment or for scientific study.
- It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of a resource.

National significance for cultural resources will be evaluated by applying the National Historic Landmarks criteria contained in 36 CFR Part 65 (Code of Federal Regulations).

1.3.2 Suitability

An area is considered suitable for addition to the national park system if it represents a natural or cultural resource type that is not already adequately represented in the national park system, or is not comparably represented and protected for public enjoyment by other federal agencies; tribal, state, or local governments; or the private sector.
Adequacy of representation is determined on a case-by-case basis by comparing the potential addition to other comparably managed areas representing the same resource type, while considering differences or similarities in the character, quality, quantity, or combination of resource values. The comparative analysis also addresses rarity of the resources, interpretive and educational potential, and similar resources already protected in the national park system or in other public or private ownership. The comparison results in a determination of whether the proposed new area would expand, enhance, or duplicate resource protection or visitor use opportunities found in other comparably managed areas.

### 1.3.3 Feasibility

To be feasible as a new unit of the national park system, an area must be

1. of sufficient size and appropriate configuration to ensure sustainable resource protection and visitor enjoyment (taking into account current and potential impacts from sources beyond proposed park boundaries), and
2. capable of efficient administration by the Service at a reasonable cost.

In evaluating feasibility, the Service considers a variety of factors for a study area, such as the following:

- size
- boundary configurations
- current and potential uses of the study area and surrounding lands
- landownership patterns
- public enjoyment potential
- costs associated with acquisition, development, restoration, and operation
- access
- current and potential threats to the resources
- existing degradation of resources
- staffing requirements
- local planning and zoning
- the level of local and general public support (including landowners)
- the economic/socioeconomic impacts of designation as a unit of the national park system

The feasibility evaluation also considers the ability of the National Park Service to undertake new management responsibilities in light of current and projected availability of funding and personnel.

An overall evaluation of feasibility will be made after taking into account all of the above factors. However, evaluations may sometimes identify concerns or conditions, rather than simply reach a yes or no conclusion. For example, some new areas may be feasible additions to the national park system only if landowners are willing to sell, or the boundary encompasses specific areas necessary for visitor access, or state or local governments will provide appropriate assurances that adjacent land uses will remain compatible with the study area’s resources and values.

### 1.3.4 Direct NPS Management

There are many excellent examples of the successful management of important natural and cultural resources by other public agencies, private conservation organizations, and individuals. The National Park Service applauds these accomplishments and actively encourages the expansion of conservation activities by state, local, and private entities and by other federal agencies.
Unless direct NPS management of a studied area is identified as the clearly superior alternative, the Service will recommend that one or more of these other entities assume a lead management role, and that the area not receive national park system status.

Studies will evaluate an appropriate range of management alternatives and will identify which alternative or combination of alternatives would, in the professional judgment of the Director, be most effective and efficient in protecting significant resources and providing opportunities for appropriate public enjoyment. Alternatives for NPS management will not be developed for study areas that fail to meet any one of the four criteria for inclusion listed in section 1.3.

In cases where a study area’s resources meet criteria for national significance but do not meet other criteria for inclusion in the national park system, the Service may instead recommend an alternative status, such as “affiliated area.” To be eligible for affiliated area status, the area’s resources must (1) meet the same standards for significance and suitability that apply to units of the national park system; (2) require some special recognition or technical assistance beyond what is available through existing NPS programs; (3) be managed in accordance with the policies and standards that apply to units of the national park system; and (4) be assured of sustained resource protection, as documented in a formal agreement between the Service and the nonfederal management entity. Designation as a “heritage area” is another option that may be recommended. Heritage areas have a nationally important, distinctive assemblage of resources that is best managed for conservation, recreation, education, and continued use through partnerships among public and private entities at the local or regional level. Either of these two alternatives (and others as well) would recognize an area’s importance to the nation without requiring or implying management by the National Park Service.
Summary of Public Outreach Efforts

The National Park Service (NPS) initiated the Special Resource Study of the Ocmulgee River Corridor in middle Georgia in late 2019 as authorized in accordance with the John D. Dingell, Jr. Conservation, Management, and Recreation Act of 2019. In the initial steps of the process, the National Park Service conducted extensive research, including targeted stakeholder consultation, to document the environmental and cultural history of the study area. The environmental context and cultural and historic context documents were presented for public comment along with a list of topic questions to further inform the special resource study in early 2021.

During this civic engagement process, the National Park Service solicited feedback using two online methods. In the first method, the public could submit comments on the project website at https://parkplanning.nps.gov/OcmulgeeRiver. In the second method, the public could submit comments online using an interactive platform called a “storymap,” which was dedicated to increasing public understanding and facilitating spatial comments (accessed at shorturl.at/cstK6). The study team also hosted two virtual public meetings. The opportunity to comment either online or by mail, as well as the public meetings, was advertised through a press release in local and regional media.

The official 60-day public comment period opened on Monday, January 25, 2021, and closed on Friday, March 26, 2021. The study team hosted two virtual public meetings: one evening meeting on February 16 and one daytime meeting on February 17, both via the Microsoft Teams Live platform. The evening meeting was held from 6:30 p.m. to 8:30 p.m. (EST) and the daytime meeting was held from 1:00 p.m. to 3:00 p.m. (EST). The goals of the meetings were to share information about the purpose and process for special resource studies, provide an overview of the criteria the National Park Service applies when conducting special resource studies, provide an overview of the area and current uses, and provide direction for how to provide feedback.
Public Interest Analysis

Approximately 70 people attended the two virtual public meetings and many asked questions or provided informal feedback on the study.

During the public comment period, the study team received 2,664 correspondences. Of these, 1,856 correspondences were submitted in response to topic questions on the project website, 23 correspondences were submitted on the Ocmulgee River Corridor Environmental Context Report on the project website, and 25 correspondences were submitted on the Ocmulgee River Corridor Cultural and Historic Context Report on the project website. The project storymap logged 85 spatial comments. The study team received 667 correspondences via the US Postal Service and 8 correspondences via email. National Park Service staff entered unique emailed and postal service correspondences into the project website for analysis.

Many of the correspondences received were form letters. The study team identified two master form letters electronically in the project website. The first master form letter substantially matched 625 other electronic correspondences, while the second master form letter substantially matched 6 other correspondences. Most of the correspondences received by mail were form letters. These 604 mailed form letters followed a different master than those submitted electronically. After accounting for the form letters, the study team received 1,344 unique correspondences.

Public comments were submitted from individuals in 49 states as well as the District of Columbia. South Dakota was the only state not represented in the correspondences. However, the majority of correspondences were received from Georgia. Table 1 shows the state distribution of public comments that the public submitted directly to the project website or that the study team entered into the project website.
Table 1. Geographic Distribution of Correspondences Entered on the Project Website*

<table>
<thead>
<tr>
<th>State</th>
<th>Percentage</th>
<th>Number of Correspondences</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>51.70%</td>
<td>997</td>
</tr>
<tr>
<td>CA</td>
<td>5.60%</td>
<td>107</td>
</tr>
<tr>
<td>FL</td>
<td>5.60%</td>
<td>107</td>
</tr>
<tr>
<td>NC</td>
<td>2.50%</td>
<td>48</td>
</tr>
<tr>
<td>WA</td>
<td>2.40%</td>
<td>46</td>
</tr>
<tr>
<td>CO</td>
<td>2.00%</td>
<td>38</td>
</tr>
<tr>
<td>PA</td>
<td>2.00%</td>
<td>38</td>
</tr>
<tr>
<td>IL</td>
<td>1.90%</td>
<td>36</td>
</tr>
<tr>
<td>MD</td>
<td>1.80%</td>
<td>34</td>
</tr>
<tr>
<td>NY</td>
<td>1.70%</td>
<td>33</td>
</tr>
<tr>
<td>TN</td>
<td>1.60%</td>
<td>31</td>
</tr>
<tr>
<td>MI</td>
<td>1.60%</td>
<td>31</td>
</tr>
<tr>
<td>VA</td>
<td>1.50%</td>
<td>29</td>
</tr>
<tr>
<td>NJ</td>
<td>1.30%</td>
<td>26</td>
</tr>
<tr>
<td>OH</td>
<td>1.30%</td>
<td>26</td>
</tr>
<tr>
<td>AL</td>
<td>1.20%</td>
<td>23</td>
</tr>
<tr>
<td>WI</td>
<td>1.10%</td>
<td>22</td>
</tr>
<tr>
<td>IN</td>
<td>1.00%</td>
<td>19</td>
</tr>
</tbody>
</table>

*States representing less than 1% of correspondences were omitted.
Of the 604 form letters received by mail, 587 (97.2\%) were postmarked from Georgia. These in-state form letters came from 103 different counties, although about half came from the Macon (Bibb County) and Atlanta (DeKalb, Fulton, Cobb, and Gwinnet counties) areas (Table 2).

Table 2. Distribution of Form Letters from Georgia Counties

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage</th>
<th>Number of Mailed Form Letters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bibb</td>
<td>17.21%</td>
<td>101</td>
</tr>
<tr>
<td>DeKalb</td>
<td>8.35%</td>
<td>49</td>
</tr>
<tr>
<td>Fulton</td>
<td>7.33%</td>
<td>43</td>
</tr>
<tr>
<td>Cobb</td>
<td>7.16%</td>
<td>42</td>
</tr>
<tr>
<td>Gwinnett</td>
<td>5.45%</td>
<td>32</td>
</tr>
<tr>
<td>Clarke</td>
<td>3.58%</td>
<td>21</td>
</tr>
<tr>
<td>Chatham</td>
<td>2.21%</td>
<td>13</td>
</tr>
<tr>
<td>Houston</td>
<td>2.21%</td>
<td>13</td>
</tr>
<tr>
<td>Cherokee</td>
<td>2.04%</td>
<td>12</td>
</tr>
<tr>
<td>Jones</td>
<td>2.04%</td>
<td>12</td>
</tr>
<tr>
<td>Columbia</td>
<td>1.70%</td>
<td>10</td>
</tr>
<tr>
<td>Muscogee</td>
<td>1.70%</td>
<td>10</td>
</tr>
<tr>
<td>Twiggs</td>
<td>1.70%</td>
<td>10</td>
</tr>
<tr>
<td>Hall</td>
<td>1.53%</td>
<td>9</td>
</tr>
<tr>
<td>Oconee</td>
<td>1.53%</td>
<td>9</td>
</tr>
<tr>
<td>Glynn</td>
<td>1.36%</td>
<td>8</td>
</tr>
<tr>
<td>Fayette</td>
<td>1.19%</td>
<td>7</td>
</tr>
<tr>
<td>Baldwin</td>
<td>1.02%</td>
<td>6</td>
</tr>
<tr>
<td>Floyd</td>
<td>1.02%</td>
<td>6</td>
</tr>
<tr>
<td>Gilmer</td>
<td>1.02%</td>
<td>6</td>
</tr>
<tr>
<td>Walton</td>
<td>1.02%</td>
<td>6</td>
</tr>
<tr>
<td>80 Other Counties (5 or fewer, each)</td>
<td>27.60%</td>
<td>162</td>
</tr>
</tbody>
</table>
Most of the correspondences were from individuals, although the study team received many letters from organizations as well. The National Park Service received official correspondence from the following tribal governments, local governments, state and federal agencies, organizations, and businesses:

- Backcountry Hunters and Anglers
- Center for Biological Diversity & Defenders of Wildlife
- Cochran-Bleckley Industrial and Economic Development Authority
- Fall-Line Alliance for a Clean Environment
- Friends of Georgia, Inc.
- Georgia Conservancy
- Georgia Department of Natural Resources
- Georgia River Network
- Georgia Sentinel Landscape
- Georgia Wildlife Federation
- Georgia Women (And Those Who Stand With Us)
- Hawkinsville-Pulaski Economic Development Office
- National Parks Conservation Association
- National Trust for Historic Preservation
- National Wildlife Refuge Association
- Ocmulgee Archaeological Society
- Ocmulgee Mounds Association, Inc.
- Ocmulgee National Park & Preserve Initiative
- Ocmulgee Outdoor Expeditions
- Ogeechee Riverkeeper
- Robins Air Force Base
- Southern Georgia Regional Commission
- Tennessee Citizens for Wilderness Planning
- The Muscogee (Creek) Nation
- The Nature Conservancy
- US Fish and Wildlife Service
- Visit Macon
The National Park Service study team sought feedback on the special resource study by asking five questions on the project website:

1. What sites, resources, values, and stories from the river corridor study area do you believe are most important and why?

2. Within the river corridor study area, what types of activities and experiences are most important to you? What types of activities and experiences would you like to see available in the study area?

3. What is your vision for the Ocmulgee River Corridor and how would you like to see the area managed?

4. Do you have any concerns that the National Park Service should be aware of while the study progresses?

5. Do you have any other ideas, comments, or questions you would like to share with us?

The study team also sought open-ended feedback on the Ocmulgee River Corridor Cultural and Historic Context Report and the Ocmulgee River Corridor Environmental Context Report. In addition, the team solicited spatial comments via the storymap, an interactive web-mapping interface. The following section presents a brief overview of the public comments received in all of these venues, organized by primary topics of concern.

Vision for the Ocmulgee River Corridor

SUPPORT FOR NPS DESIGNATION

A majority of the public comments were in favor of NPS designation along the Ocmulgee River Corridor. Reasons included:

- Preserving the area in a quickly developing area and its associated pollution from an urban and suburban landscape

- Establishing a contiguous strip and managing it wisely for present and future generations

- Protecting a natural and cultural space for the public to enjoy the outdoors

- Providing opportunities for the public to have recreational resources in close proximity to urban areas

- Expecting that the National Park Service would bring a cohesive experience to the network of protected sites making the area an attractive destination
In addition, many commenters observed the lack of national park units in the Southeast that have a wide range of natural, cultural, and recreational potential. The public comments valued the combination of natural and cultural resources as being unique and important to protect. A large number of commenters compared the Ocmulgee River Corridor to many of the national park units in the West and noted the importance of allowing people from all over the United States to visit and learn about the significance of this area. Many commenters shared stories of visiting the area as a child and building stewardship for the area and its resources and noted that they are actively passing along the love of the land to their children and grandchildren.

**OPPOSITION TO NPS DESIGNATION**

Some commenters who showed opposition to NPS management commented that the Georgia Department of Natural Resources (DNR) is managing the area well within its wildlife management areas. Commenters expressed opposition to a federal presence and would like to see the area continue to be managed in the same way. Some comments mentioned that state management allowed preservation of historical artifacts while keeping access available for public recreation, including hunting and fishing.

Comments included support for keeping management local and a fear that the federal government would not include input from local entities. Some commenters were concerned that an NPS designation would result in loss of public hunting opportunities and stressed the importance of preserving these opportunities for future generations. Several of these comments noted that conservation of these lands has been funded by hunting and fishing revenues. Others based their opposition to NPS designation on the belief that it would force people out of their homes and off their land.

Some comments stated that it would be challenging for the National Park Service to actively manage the area and would reduce the effectiveness of hunting as a tool for managing species. Some comments showed concern that the National Park Service would struggle with appropriate funding to manage the area.

**JOINT MANAGEMENT**

A portion of comments included support for collaborative, multiagency management among the US Department of Defense, US Fish and Wildlife Service, National Park Service, the Georgia Department of Natural Resources, and Muscogee (Creek) Nation. Commenters noted that multiple agencies, including both state and federal entities, could manage the large study boundary jointly. Commenters suggested a national park and preserve, national recreation area, or other types of designations that could be modeled after other multiagency partnerships existing within the national park system such as Timucuan Ecological and Historic Preserve and Santa Monica Mountains National Recreation Area to provide federal, state, and tribal support and conservation funding and to leverage private fundraising. However, other comments noted that there would be advantages to management by one organization or agency to provide uniformity and consistency in policy and direction.
Activities and Experiences along the Ocmulgee River Corridor

HUNTING AND FISHING

The public showed support for maintaining current hunting and fishing opportunities along the corridor. Many comments showed concern that these opportunities would be limited or eliminated with an NPS designation. Other commenters suggested designating a national park and preserve as a means of retaining hunting and fishing opportunities.

Several commenters reported benefits to allowing hunting to control the deer and feral hog populations and stressed the importance of allowing this experience for future generations. Some commenters mentioned that they were not hunters but saw value in continuing to allow hunting, since it is a long-standing tradition in the area. Without hunting opportunities in this area, hunters would have limited areas to hunt and would have to travel further distances to hunt on state land, which could potentially have negative impacts on those lands.

A small minority of commenters who mentioned hunting advocated for discontinuing the practice. Comments cited various reasons to not allow hunting, including a desire to protect thriving populations of birds, amphibians, and wildlife; allowing wildlife space to live peacefully, renew, and replenish; and the potential danger to visitors. Other comments expressed a desire to minimize hunting activities but recognized some wildlife management may be necessary. These comments tended to support specific recommendations, such as protecting certain wildlife (e.g., bears) but not others (e.g., feral hogs), or a proposal to keep wildlife management areas open to hunting but closing any new park lands to hunting.
RECREATION

The public expressed support for making the corridor more accessible via trail connectivity to urban areas for cyclists and hikers, personal vehicle access, maintaining and potentially adding boat ramps, and proper access for hunting and fishing. Comments included creating multiuse trails to connect Macon and Hawkinsville with each other as well as other towns along the corridor. Many commenters mentioned that they would like to see appropriate visitor services along the corridor for access but also would like to leave the area in a natural state for visitor enjoyment. They noted that consideration should be given for easy access for the public, including people with disabilities.

Public comments valued preservation of natural and cultural resources while still having access for recreation. The public comments described recreation as an important component for building stewardship for resources along the corridor. Public comments were in support of access to historic sites with guided tours and waysides to learn about the resources and historical significance. Recreational activities mentioned included hiking, biking, horseback riding, paddling (e.g., canoe, kayak, stand-up paddleboarding), camping, wildlife viewing, and birding.

Some commenters told stories of paddling along the continuous river corridor with access to camping and their enjoyment of that experience. Public comments were in favor of both primitive and developed camping opportunities. The public comments were in favor of limiting paved roads and limiting motorized use (i.e., off-road vehicles) in order to maintain integrity of the natural resources.

EDUCATIONAL OPPORTUNITIES

Commenters noted the unique combination of resources and the educational programs and experiences to interpret the natural and cultural significance of the area. These commenters noted that they would like to see natural and cultural history studied. Commenters suggested educational tours for families and especially children to begin building an awareness of, appreciation for, and support for preservation of these resources. Some commenters shared stories of school field trips to the corridor and the lasting impression it had, often noting that getting out into the area (as opposed to learning through books) builds relationships to natural and cultural resources over time. The public suggested archeological study, school tours, wildlife tours, nature writing, and river history classes.
Sites, Resources, and Values

CULTURAL RESOURCES
Many commenters mentioned the cultural resources of the Ocmulgee River corridor. The ancient mounds beyond the existing national historical park, in particular, were frequently mentioned as a resource of great interest. In fact, many commenters reflected on the primacy of the mound resources over other resources and values in the corridor, although several did recognize that the mosaic of the cultural resources with other natural features of interest set this area apart. Many comments noted the interpretive and research potential of the mounds and related resources, often referred to as national treasures, and the uniqueness of actually being able to go inside the earth lodge and experience that history. Commenters see the mounds as classrooms or portals of history that need to be preserved and interpreted to increase awareness and knowledge of a dark chapter in American history that often isn’t adequately addressed in schools (i.e., the forced removal of the Muscogee (Creek) people from their homelands, often referred to as the Trail of Tears). Elevating awareness of these resources outside of middle Georgia and ensuring their protection were seen as key reasons why a national park site should be created.

Discussion of the mounds and other Native American resources like the Ocmulgee Old Fields Traditional Cultural Property often included emphasis on protecting these resources in partnership with the Muscogee (Creek) Nation. Suggestions about the Muscogee (Creek) Nation’s role included a range from providing input about interpretation, to direct input into management, to ultimate decision-making authority over what happens on their ancestral homelands.

Commenters also noted a number of other cultural resources that are important within the corridor, including Fort Hawkins (which is related to the story of removal of the Creek people from their homeland); Works Progress Administration-era archeology and related discoveries from the New Deal; African American resources, including nearby settlements, communities, cemeteries, places of refuge, and pathways to freedom; a WWI and WWII training camp southeast of Macon (Camp Wheeler); and Civil War relics. Overall, commenters viewed the record of continuous human presence dating back 17,000 years—ranked by the National Trust for Historic Preservation as among the nation’s richest archaeological landscapes—as a resource of paramount importance.

NATURAL RESOURCES
The wildlife of the Ocmulgee River corridor was frequently referenced as an important resource worthy of protection. Black bears were the most frequently mentioned species, with commenters noting that the area is home to one of three populations in the state. The genetic isolation of this population and its small size was a concern. Commenters mentioned the importance of the river corridor as a migratory travel route for bears and that frequent flooding forces bears into upland areas where they face threats from vehicular traffic and hunting. Commenters also frequently mentioned threatened and endangered species at the federal and state level, including Atlantic sturgeon, shortnose sturgeon, and gopher tortoise.
Other threatened and endangered species that were less frequently mentioned include robust redhorse sucker, Altamaha shiner, goldstripe darter, shoal bass, spotted turtle, gopher frog, Altamaha arc-mussel, Ocmulgee marstonia, relict populations of lobed spleenworts and Ocmulgee scutalaria, and the potential presence of Altamaha spinymussel. Commenters also noted the importance of the area for other terrestrial and aquatic species such as bobcats, otters, feral hogs, coyote, foxes, and white-tailed deer. Commenters had particular concern for the tremendous diversity of reptiles and amphibians like alligators, snakes, and the American eel. Commenters also mentioned migratory and breeding birds, including Swainson’s warbler, red-cockaded woodpecker, wood stork, swallows, owls, hawks, ducks, wild turkeys, and bald eagles.

Commenters expressed concern for the protection of wildlife habitat and advocated for the general importance of rivers and bottomlands as migration corridors to wildlife. The fact that wildlife has less and less space due to development encroachment and habitat fragmentation was seen as reason to improve protection of this area. Commenters noted the area for its role as a space of refuge for bald eagles when their populations dwindled. Commenters also noted that some species, such as red wolves, used to live in the Ocmulgee area but are now locally extinct. Commenters did not want black bears and other species to be extinct as well. Relatedly, several commenters noted a need for habitat restoration to benefit species like bobwhite quail and loggerhead shrike as well as the need to rid the area of invasive species. One commenter noted that the area is the center for biodiversity in the country with an unmatched number of species of fish, freshwater mussels, and trees.

Some commenters mentioned plants and vegetation. Most frequently, commenters noted that the Ocmulgee area represents one of the largest areas of contiguous bottomland-hardwood swamp on the Upper Coastal Plain. The threat to mature forests in Georgia was oft noted, and commenters remarked on the need to allow for the establishment of long-leaf pine, pond/bald cypress, and shagbark hickory. Commenters noted that reestablishing these slow-growing species would take active habitat restoration, including reintroducing fire to the landscape, as simple preservation of extant vegetation would not promote the growth of native species. Several commenters mentioned the importance of protecting this biodiversity for research and potential medicinal uses. Franklinia, a species once found in this region and now extinct in the wild, was mentioned by some commenters, as was the fact that some plants grow only in the Ocmulgee River Corridor.

Public commenters also mentioned other natural resources that are important to protect, including clean water and watersheds; ecosystem services, such as filtration of stormwater runoff; ecological balance; delicate ecosystems, such as swamps, marshes, wetlands, and blackland prairies; the natural beauty of the landscape; the landscape’s resiliency to climate change; and karst springs.
LANDSCAPE CONSERVATION AND CONNECTIVITY

Many commenters raised the values of landscape-scale conservation and advocated for the National Park Service to understand the scale, undisturbed or undeveloped nature, and interconnectedness as the primary resource or value present along the Ocmulgee River Corridor. Comments focused on the fact that few large areas of relatively intact ecosystems remain in the eastern United States and that given the ever-present threat of development of these places, those that remain should be protected. These areas are relatively rare and irreplaceable and are of great value to fish and wildlife, water quality, and carbon sequestration.

Several of these comments focused on the fact that the Ocmulgee/Altamaha river system is undammed between Jackson Lake and the Atlantic Ocean, making it one of the longest undammed river systems in the eastern United States. The lack of dams provides excellent aquatic and migratory fish connectivity. In a similar vein, comments remarked on the value the Ocmulgee River corridor has as a migration corridor for wildlife, including black bears and potentially red-cockaded woodpeckers. The unrestricted wildlife movement in this area overcomes one of the primary challenges for rare and declining species. Commenters also noted the ecological and symbolic role a park connecting the Piedmont region of Georgia with the Coastal Plain region would play.

The value of landscape-scale conservation was noted to extend beyond natural resource benefits and include cultural resources and visitor opportunities. From a cultural resource perspective, the mounds were noted as being central to the river system as part of Creek peoples’ cultural story. Commenters argued that isolated sites and smaller objects are often seen as devoid of meaning or significance when separated from their broader cultural context on the landscape. These comments asserted that a landscape of cultural resources is inherently more valuable than isolated resources. Similar to the natural resources, commenters argued that because many of the cultural landscapes of the Ocmulgee River corridor are relatively undisturbed, they are rare and worthy of protection.

From a visitor perspective, comments noted that the Southeast is largely devoid of large, connected areas that provide wilderness-like opportunities and experiences. The opportunities for long paddles and other longer experiences along the Ocmulgee River make its possible preservation a special opportunity.

Lastly, some comments noted that the criteria used by National Park Service to determine significance, such as the national natural landmark criteria and the national historic landmark criteria, may be too narrow. They noted that the National Park Service may have other means of determining national significance.
Concerns and Observations

SOCIOECONOMIC CONSIDERATIONS

The public comments noted the economic benefits of an NPS designation for struggling communities in the area. Several comments noted a lack of public open space in close proximity to the Ocmulgee River Corridor and that a park unit could bring additional tourism, leading to additional jobs in the local area. One commenter envisioned this area to be a destination for visitors and local residents for recreation opportunities, but comments still held preservation of the resources as a priority and discussed the balance between drawing in tourism and protecting resources. Public comments noted the commercial services that could be provided in support of recreation, including equipment rentals, food and beverage, guided services, and lodging to boost the economy. Many comments stemmed from the value of recreation to cultivate regional tourism.

Commenters noted that the visiting public values traveling to NPS units and would enjoy the opportunity to bring environmental stewardship to the area, supporting local economies. The comments valued preservation and stewardship of resources as integral to the economic goals of the region.

One commenter showed concern that the local community could see negative impacts from making the area overdeveloped.

THREATS AND ISSUES

The public provided several comments regarding potential threats to the area, most notably pollution, development, extractive industry, unsustainable agriculture, and invasive species. Pollution and litter threats were some of the most commonly mentioned, with some commenters pointing to specific sources of pollution, including city sewage potentially leaching into the river, a potential unlined coal-ash pond, illegal dumping of tires and plastics, expelled cartridges from hunting, and drinking and partying introducing aluminum cans to the area. Many commenters recounted experiences of the shocking levels of trash they found while participating in river cleanup events.

Several commenters also pointed to the threat posed by development encroaching on this previously undeveloped area, with one commenter citing a study suggesting that 39% of the study area is expected to be developed by 2060. Commenters noted that due to threats posed by climate change, forested lands like those along the Ocmulgee River need to be protected and expanded to keep carbon out of the atmosphere.

Other commenters focused on the threats posed by invasive species, including feral hogs, catfish, and invasive plants. Extractive industry and agriculture were also concerning for some, with timber harvesting, surface mining (due to cheap land and valuable minerals in the soil), and the “unsustainable” way in which much of the area’s agriculture is done all cited as concerns. The combination of all these issues had several commenters concerned about species extirpation, with one commenter noting that 28% of the study area’s fish, more than 48% of its crayfish, and more than 70% of its mussels are at risk for local extirpation. Other concerns or threats included potential mound vandalization and the fact that some current landowners have enacted road closures, thus blocking access to the area for others.
LEVEL OF ACCESS AND RECREATION IMPACTS

Commenters remarked on the level of access and recreational opportunities they believed would come with designation as a national park unit. Many of these commenters celebrated what they saw as a potential increase in access and recreational opportunity, with some providing specific recommendations for ways to increase access, such as adding boat launches and campgrounds to allow for multiday river trips, hiking and biking trails, horseback riding opportunities, and lands for hunting and fishing. Other commenters were concerned that the designation of a national park site would decrease their access and recreational opportunities, particularly for hunting and fishing.

Many commenters expressed concern about the level of development that could accompany designation as a national park unit. The undeveloped nature of the area is what several commenters particularly value about the area, and they encouraged the National Park Service to minimize roads, parking lots, visitor centers, and other forms of development if there were to be an NPS designation. These comments noted that with a national park unit often comes more development. The fragile swamp environment may not be resilient to visitation and commenters expressed a desire for the area not to be negatively impacted. On the other hand, commenters also noted that more access often means more awareness of an area that ultimately inspires people to care about the area. The relative lack of public lands in central Georgia was seen as a reason to designate a park at the Ocmulgee River corridor and spread out recreational use.

COSTS AND MAINTENANCE

Some commenters expressed concerns about the potential costs associated with maintaining a national park unit, with some mentioning the National Park System’s deferred maintenance backlog and wondering why the agency would accept further maintenance responsibilities. Other commenters were concerned that any potential new park unit would be inadequately funded by the federal government or that the funding would be subject to political whims. To help address this foreseeable shortage of funding, some commenters offered to help fund the park, mentioned groups that could provide financial support, or recommended that friends groups be established. Finally, some commenters expressed the belief that the study, and any potential national park unit, is a waste of taxpayer money.
Recommendations for the Study Team

INCLUSION OF VARIOUS PERSPECTIVES

Commenters generally showed concern for existing and historic communities that have called the Ocmulgee River Corridor home and urged NPS to involve them in the study process. Foremost among these comments, the NPS was urged to give voice to, and listen to, the Muscogee (Creek) Nation and other tribes as vital partners in the study process. Commenters also noted the tribes should have a voice in eventual park management similar to what is done in many national parks in Australia. Commenters also urged NPS to work closely with several other groups during the study process, including Ocmulgee National Park and Preserve Initiative, National Trust for Historic Preservation, local landowners, the Georgia Department of Natural Resources, historically Black communities around the study area, and people with disabilities. Commenters also urged NPS to treat local landowners, many of whom may be poor and/or people of color, with dignity and respect throughout the study process. To encourage a broad spectrum of participation, some commenters even volunteered to be on steering committees to guide the effort.
RECOMMENDED REFERENCES

Commenters recommended a number of references, including subject matter experts and published works that the Special Resource Study team may find useful:

- Stephen Hammock, historian and archeologist. Regarded as well educated about the Ocmulgee area and a great potential resource for specific archaeological sites and information in the coverage area.

- A Mercer University survey of known historical and archaeological sites along the 70 river miles between Macon and Hawkinsville. Recently completed as a part of the park proposal. Dominic Day catalogued and mapped almost 900 historic sites that had been previously documented.

- NPS Prehistoric Site Survey (10,000 BC to 1500 AD) by Mark Barnes. Used in assisting the development of Dr. Keel’s southeast archeological overview.

- NPS draft national historic landmark documentation of the Lamar site by Mark Barnes. Created in preparation for the larger Multiple Property National Register/National Historic Landmark nomination. The Lamar site study identified the site as potentially nationally significant and was submitted to the landmarks office in Washington, DC.


- Ocmulgee Audubon Society and Georgia Ornithological Society.

- Mike Hooker, PhD, bear researcher. Has researched the middle Georgia bear population.

QUESTIONS

Below are paraphrased questions from commenters (in italics), followed by answers from the study team.

If the area is designated as a national park, will hunting still be allowed on Bond Swamp National Wildlife Refuge and the three state-managed wildlife management areas?

If an NPS unit were to be created that included these lands whole or in part, it would not necessarily change how the Bond Swamp National Wildlife Refuge is managed by the US Fish and Wildlife Service or how the state wildlife management areas are managed by Georgia DNR. This includes these organizations’ regulations regarding hunting and fishing.

There are many examples of national park units that encompass or contain lands managed by other state or federal land managers. Examples include Cape Hatteras National Seashore in North Carolina (includes Pea Island NWR), Cuyahoga Valley National Park near Cleveland, Ohio (includes various metro parks), and Santa Monica Mountains National Recreation Area near Los Angeles (includes multiple state and city parks). In these situations, rules and regulations and their enforcement are the responsibility of the land-managing agency.

How will the Muscogee (Creek) Nation and other tribes be involved in the project?

The NPS study team is consulting with the Muscogee (Creek) Nation and other interested tribes on the national significance evaluation. We have also relied upon their input and information shared with us to help with the production of the two context documents and with the identification of the draft study boundary.

How will the public be updated about the study’s progress?

The National Park Service will publicly release a study report after it has been transmitted to Congress. The National Park Service generally does not release preliminary findings or drafts of a study or indicate whether or not a study is likely to recommend inclusion in the national park system.

When will the study team reach a determination?

The general timeline for study completion is fall 2022.

How can the study be supported?

The National Park Service does not accept outside funding for authorized special studies. The NPS Park Planning and Special Studies Division provides funding, oversight, and policy direction for studies of potential new park units and other national designations when authorized by Congress. The special resource study and related processes are designed to provide Congress with information about the resource qualities at the site and alternatives for protection, which is used in the legislative process of designating a new national park unit, or unit of the National Trails System, National Wild and Scenic Rivers system, or a new National Heritage Area.
RECOMMENDED ADDITIONS TO STUDY AREA

Commenters recommended several specific areas be added to the study area boundary. Those recommendations, and any associated rationale, are included below. Figure 1 shows these areas spatially in a consolidated view.

• The corridor along the Ocmulgee River north of Macon, as far north as Jackson Lake/Lloyd Shoals Dam. This was the most common recommended addition, and various rationales were provided. The first rationale is the protection of historically significant resources along the river. Another reason is because contaminants and pollution that enter the river upstream will ultimately flow downstream into the study area. Commenters noted that this stretch of river is bound by the Piedmont National Wildlife Refuge and the Oconee National Forest. Commenters also remarked that extending the study area up to Arkwright would diversify recreation options, most notably more challenging rafting, as well as diversifying the geographic regions represented by the study area, including lands on both sides of the Fall Line. A few commenters justified including the river north of Macon up to the Bibb County line and noted that the “City of Macon” ceased to exist as a jurisdictional entity in 2014, before the signing of Dingell Act. Therefore, “Macon” in the special resource study authorizing legislation should be interpreted as the consolidated city-county government known as Macon-Bibb County, which is recognized by the US Census Bureau, according to the commenters.

• The corridor along the Ocmulgee River south of Hawkinsville to Sand Hammock Boat Landing, or to the Pulaski County line. Commenters lauded this area for its quality wildlife habitat and the slower, more meandering river.

• The Altamaha and Satilla Rivers. Commenters mentioned the importance and value of protecting the whole river corridor system of southeast Georgia.

• Rock Eagle Mound

• Etowah Mound

• Kettle Creek

• Walnut Creek

• Fort Hawkins

• Lakeside Park. Commenters noted childhood memories of this place.

• All undeveloped portions of Robins Air Force Base

• All undeveloped portions along Tobesofkee Creek and Echeconee Creek up to US Highway 129

• All portions of the Ocmulgee Old Fields Traditional Cultural property

• An area around Ocmulgee Wildlife Management Area on the east side of the river
• An area around Oaky Woods Wildlife Management Area on the west side of the river
• Big Indian Creek corridor
• Griswoldville Civil War battlefield
In addition to these specific recommendations for areas to include in the study area, some commenters also made more conceptual recommendations for ways to improve the study area boundary. These recommendations stated that the study area should include more than just floodplains and should include connected sites in the uplands to meet conservation needs of a broader diversity of wildlife and provide corridors for seasonal and circadian movements of many species. Another recommendation was to include the Ocmulgee Mounds National Historical Park within the study area to create an integrated national park. Suggestions also included using conservation easements to protect the entire river basin. Another suggestion was to expand the study area to include surrounding wetlands. The creation of a larger buffer along the river to protect water quality in areas where the draft study area boundary gets close to the river’s edge was also suggested. Notably, a few commenters urged the National Park Service not to bisect existing land management areas like the Georgia Department of Natural Resources wildlife management areas, Brown’s Mount, or Bond Swamp National Wildlife Refuge, as doing so would create a confusing patchwork of land management agencies, designations, jurisdictions, and regulatory guidelines. Some of these comments recommended including the authorized boundaries of all of these designated spaces within the study area.

OTHER COMMENTS RELATED TO STUDY AREA BOUNDARY

Some commenters suggested that existing federal lands—including Robins Air Force Base and the Bond Swamp National Wildlife Refuge—as well as lands under the management of the Georgia Department of Natural Resources, should not be included in whole or in part in the study area. These commenters pointed to the managing agencies’ success in conserving natural and cultural resources as evidence of the agencies’ qualifications in managing and conserving high-priority river corridor lands. Commenters also noted that a national park would likely encroach on the respective missions of the managing agencies. Some commenters expressed a desire for current land managers to continue this management if they are included within the study area boundary or an eventual national park unit.
Appendix D: National Historic Landmarks
Program Memo on National Significance of the Ocmulgee River Corridor Study Area

Background

The National Historic Landmarks (NHL) Program of the National Park Service (NPS) has completed its review of the “National Significance Finding” dated November 2021, prepared as part of the Congressionally-authorized Special Resource Study (SRS) of the Ocmulgee River Corridor from Macon to Hawkinsville, Georgia.

The National Significance Finding was prepared by a team from the NPS Denver Service Center with assistance from planning and cultural resources staff in the legacy NPS Southeast Regional Office (Interior Region 2)(SRS Team). The document defines the study area; proposes a historic district provisionally identified as the Ocmulgee River Corridor Cultural and Archeological District (District); and reaches two findings in relation to the national significance of cultural resources within the district. The conclusions rely upon the National Historic Landmarks criteria and integrity aspects to establish the proposed district’s national significance.

The NHL Program’s role is to evaluate the national significance for the proposed Ocmulgee River Corridor Cultural and Archeological District, as presented in the National Significance Finding, according to National Historic Landmark criteria, notably

The quality of national significance is ascribed to districts, sites, buildings, structures and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.....
NHL Program Findings

The NHL Program agrees the resources are potentially significant under Criterion 1 and Criterion 6, although with disagreement as to the scope of the application of Criterion 6.

Discussion

(1) SRS Team Finding No. 1: Professionalization of American archeology

The National Significance Finding concludes

the resources associated with New Deal archeology within the Ocmulgee River Corridor Cultural and Archeological District are potentially eligible as nationally significant under NHL Criterion 1 for their association with the professionalization of American archeology as part of national work relief programs during the 1930s and 1940s.

(National Significance Finding, p. 52.)

Criterion 1 applies to properties “associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained…..” (36 C.F.R. 65.4(a)(1)). As noted in the National Significance Finding, the New Deal archeology programs undertaken in this part of central Georgia “helped fundamentally change the practice of archeology in America, leading to advances in theory and methodology that still shape the practice of archeology today.” (National Significance Finding, p. 8.) Advances assumed several forms, including but not limited to the development and implementation of standardized survey techniques that included stratigraphic excavation; application of seriation; and advances in field technique and relative chronology with applicability beyond central Georgia. These and other methods developed and applied at that time had implications beyond the region that render them nationally significant in the history of American archeology.

Such nationally significant resources are expected to have a “high degree of integrity of location, design, setting, materials, workmanship, feeling and association” (36 C.F.R. 65.4(a), emphasis added) and the National Significance Finding reports that at least 15 of the 24 sites determined by the SRS Team as contributing to the significance of the proposed District have been compromised by New Deal archeology work, erosion, and/or modern intrusions such as agriculture and roads. Nevertheless, with respect to these 15 sites, as stated in NPS guidance How to Prepare National Historic Landmark Nominations (NHL Bulletin), “[resources] that have yielded important information in the past and that no longer retain additional research potential (such as completely excavated archeological sites) must be assessed essentially as historic sites under Criterion 1.” (NHL Bulletin p. 30.) The SRS team has successfully applied this guidance in its National Significance Finding.
(2) SRS Team Finding No. 2: Potential to yield information regarding New Deal archeological techniques and Creek heritage, history, and identity

The National Significance Finding offers a second conclusion, of two parts, stating

the resources associated with New Deal archeology within the Ocmulgee River Corridor Cultural and Archeological District are potentially eligible as nationally significant...under NHL Criterion 6 for their potential to advance and critique the conclusions of the New Deal era and advance understanding of Creek heritage, history, and identity.

(National Significance Finding, p. 53.)

The NHL Program (a) agrees the resources may be nationally significant under Criterion 6 for their potential to advance understanding of Creek history, heritage, and identity but (b) does not agree that the resources are nationally significant under Criterion 6 for their potential to advance and critique the conclusions of the New Deal era work. Each is addressed, below.

(a) National significance for their potential to advance Creek history, heritage, and identity

Criterion 6 was developed specifically to recognize archeological properties, all of which must be evaluated under this criterion. (NHL Bulletin, p. 30.) Properties being considered under this criterion must address the questions of 1) what nationally significant information the site is likely to yield and 2) whether the information already produced is nationally important. (Id.) While not posed, as expected, as research questions, the National Significance Finding does suggest that 20th century investigations yielded, and 21st century investigations will yield, information regarding people whose history, heritage, and very identity long played an outsize role in American history. (See, National Significance Finding, p. 19.)

Seemingly problematic is the issue of integrity of the resources in the proposed District. As noted above, a “high degree of integrity of location, design, setting, materials, workmanship, feeling and association” is a specific criteria of national significance (36 C.F.R. 65.4(a), emphasis added). For resources considered under Criterion 6, integrity is based upon the resources professionally demonstrated intactness of archeological deposits and features. (NHL Bulletin, p. 30.) The National Significance Finding reports that no fieldwork was conducted for its evaluation, but that official archeological records were used in its determination and that, based on the total number of archeological sites within the study area, there is still archeological potential in unsurveyed areas within the river corridor both to identify new sites and revisit sites where documentation is incomplete. (National Significance Finding, p. 53.) Further, the National Significance Finding reports that 9 of the 24 sites determined by the SRS Team as contributing to the significance of the proposed District are undisturbed or not fully excavated and thus may yield information to advance understanding of Creek heritage, history, and identity.

(b) National significance for their potential to advance and critique New Deal era work

There is considerable value to be derived from the indigenous critique of the conclusions drawn by non-indigenous archeologists working in the 1930s and 1940s at sites in the study area and elsewhere. In fact, an active and informative indigenous critique of the discipline of archeology has been ongoing on a
national, if not global, scale since at least the late 1990s and early 2000s. In the United States, this important work builds upon the spirited critique of the entire discipline of anthropology as expressed in such pivotal works as Vine Deloria’s “Anthropologists and Other Friends” in *Custer Died for Your Sins: An Indian Manifesto* (originally published in 1969 and subject to numerous reprintings).

However, such a critique is properly addressed in the context of the professionalization of American archeology, proposed to be addressed under Criterion 1, above. As noted at (a), above, “[resources] that have yielded important information in the past and that no longer retain additional research potential (such as completely excavated archeological sites) must be assessed essentially as historic sites under Criterion 1.” (NHL Bulletin p. 30.)

**Summary**

The NHL Program concurs that the proposed District is potentially significant under NHL Criterion 1 and Criterion 6 as detailed above.

Note that the NHL Program’s concurrence is based upon the information regarding resource integrity as presented in the National Significance Finding and that such concurrence is not a finding of eligibility for National Historic Landmark designation consideration. Although the Special Resource Study process uses NHL criteria for evaluation of national significance, any further consideration of these resources for NHL nomination would require consultation with the NHL Program for further evaluation and additional guidance.

Thank you for the opportunity to read this important document and please do not hesitate to contact NHL Program manager Dr. Lisa Davidson (lisa_davidson@nps.gov) with any questions you may have.
Appendix E: Study Team

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Zillow
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.

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