A RESOLUTION

WHEREAS, the CSRA Regional Commission has prepared a Regionally Important Resource Plan; and

WHEREAS, this document was prepared in accordance with the standards and procedures of the *Rules of Georgia's Department of Community Affairs Chapter 10-12-4*; and

WHEREAS, a copy of the Plan must be submitted to the Georgia Department of Community Affairs for review;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Central Savannah River Area Regional Commission does hereby approve the transmittal of the CSRA Regional Commission's Regionally Important Resource Plan to the Georgia Department of Community Affairs.

BE IT FURTHER RESOLVED that Andy Crosson, Executive Director of the CSRA RC, is instructed by the Board of Directors to forward a copy of this resolution acknowledging the official approval of the transmittal of the Regionally Important Resource Plan to the Georgia Department of Community Affairs.

I hereby certify that the above and foregoing resolution was duly adopted by the Central Savannah River Area Regional Commission's Council in executive session on the 28th Day of April, 2011 and recorded in the official minutes of the Central Savannah River Area Regional Commission.

James Henry, Chairman

ATTEST: _____
Anthony Crosson, Executive Director

CENTRAL SAVANNAH RIVER AREA REGIONAL COMMISSION

Regionally Important Resources Plan

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Introduction

This plan is intended to serve as a guide for the protection and management of the many important natural, cultural, and historic resources found throughout the CSRA region. These resources, hereinafter referred to as Regionally Important Resources (RIR), are those determined to be of value to the region and thus the state, and to be vulnerable to the effects of uncontrolled or incompatible development. Additionally, the plan hopes to lay a foundation for improved local, regional and state level coordination in protecting and managing these important resources.

The plan has been prepared in accordance with the rules and procedures established by the Georgia Department of Community Affairs (effective July 1, 2009) for the identification of RIRs, the development of a plan for protection and management of the RIRs, and for review of activities potentially impacting the RIRs.

Overview

The plan contains three (3) categories of RIRs: Cultural and Historic Resources, Parks and Forestry Resources, and Water Resources. Each individual resource is identified by category and reflects "snapshot" data, a description of the resource's value to the region, and an explanation of its susceptibility to the impacts of new development.

Each category concludes with appropriate development practices recommended for developers when designing new developments to be located near RIRs, and general policies and protection measures recommended for use by local governments in making decisions that affect RIRs.

Another important component of the plan is a Regionally Important Resources Map, which depicts the area's important resources, and includes a Green Infrastructure Network overlay illustrating important linkages connecting the RIRs.

Methodology

The CSRA Regional Commission regards the local knowledge and expertise of those who reside in the CSRA region as invaluable to the planning process. With this consideration in mind, the Regional Commission actively solicited Regionally Important Resource nominations from a variety of relevant stakeholders within the region.

This included all local governments as well as various state and federal agencies, land trusts, and conservation and environmental protection organizations active in the region. A complete listing of all stakeholders invited to participate in the planning process, and from which nominations were solicited, is found in Appendix A.

The CSRA Regional Commission evaluated the value and vulnerability of each of the resources nominated by regional stakeholders for possible inclusion in the plan. The evaluation focused on such factors as the regional importance of the resource (versus local importance) and the degree to which the resource is threatened or endangered (e.g. current conditions, protection measures in place, level of existing support/advocacy, etc.). All of the resources the Regional Commission determined have sufficient value and vulnerability to be considered regionally important are included in the plan.

The CSRA Regional Commission also examined various planning documents such as the Georgia Land Conservation Partnership Plan, Georgia Wildlife Action Plan, Georgia Statewide Comprehensive Outdoor Recreation Plan (SCORP), CSRA Regional Plan and the various Comprehensive Plans for the affected local governments for consideration of possible resources not nominated, but deserving of inclusion in the RIR Plan. State Vital Areas and Critical Protection Areas, as identified by the Georgia Department of Natural Resources, located within the CSRA region, are included on the RIR Map; as are any natural or cultural resource areas in the region that already have preservation mechanisms in place (State Parks, Wildlife Management Areas, National Forests, etc.). These resources serve to help form a regional green infrastructure network as depicted on the RIR Map.

Finally, the CSRA Regional Commission conferred with representatives from affected local governments and stakeholder groups to formulate a listing of recommended best practices to be used by developers when designing new developments within close proximity to these RIRs, as well as devising general policies and protection measures recommended for appropriate local management of the areas included on the RIR Map.

Stakeholder and Public Involvement

In an effort to draw upon the knowledge and expertise of those most familiar with the various RIRs, a series of stakeholders meetings were conducted during the course of the planning process. Additionally, the CSRA Regional Commission Council was invited to participate in the planning process and kept up-to-date on the development of the plan during its regularly scheduled monthly meetings. Other regional entities such as the CSRA Historic Preservation Advisory Committee (HPAC) were solicited for input and feedback.

In accordance with the Rules for Regionally Important Resources as published by the Georgia Department of Community Affairs (DCA), a regional hearing was conducted in order to give members of the general public the opportunity to comment on the

content of the plan. A draft of the RIR Plan was also made available for review on the CSRA Regional Commission website.

Timeline

Regional Commission planning activities, related to development of the RIR Plan, began in July 2008 with the identification of regional stakeholders as well as a comprehensive review of all related state and local planning documents. The first stakeholder's meeting was conducted in September 2008 where the process for soliciting RIR nominations was initiated.

In February 2009, Regional Commission staff began the process of evaluating all RIR nominations for possible inclusion in the plan. At the conclusion of this process, development of the RIR Map was initiated. A draft plan and map were presented to the general public for review and comment in April 2009.

The draft RIR Plan and corresponding RIR Map were transmitted to the Georgia Department of Community Affairs for review and notification of interested parties in August 2009. Upon receiving certification of completeness by DCA and having addressed DCA's report of findings and recommendations, the CSRA RIR Plan was formally adopted by the CSRA Regional Commission Council on January 14, 2010.

The CSRA Regional Commission will actively promulgate the plan in an effort to coordinate activities and planning of local governments, state agencies, land trusts, and conservation or environmental advocacy groups toward protection and management of the identified RIRs. Specifically, the CSRA Regional Commission will work with and encourage each of these stakeholders to coordinate their activities to foster protection of the RIRs.

Additionally, the CSRA Regional Commission will encourage local governments in the region to adopt appropriate protection measures, policies, and enhancement activities that will promote protection of the region's important resources. The Regional Commission will also encourage local governments to include the areas on the RIR Map as conservation areas in their respective local comprehensive plans and will review and evaluate local comprehensive plans for consistency with the RIR Plan.

Finally, the listing of best practices to be considered by developers when designing new developments in close proximity to RIRs, will be used by the CSRA Regional Commission when reviewing all Developments of Regional Impact (DRI) proposed to be located within one (1) mile of any area included on the RIR Map. The DRIs will be reviewed for consistency with the recommended development standards.

Natural Resources

Overview:

From the Georgia Piedmont Province's transition across the Georgia Fall Line into a more coastal landscape, the Central Savannah River Area provides a diverse natural resource inventory to its residents. Home to five state parks, fourteen designated Wildlife Management Areas (WMA's), and an abundance of water resources, the CSRA's natural resources not only provide a wealth of recreational opportunities to its residents and visitors, but they also provide important ecological significance as well. The Natural Resources section of this Regionally Important Resources (RIR) plan will outline all of the important parks and forestry resources, conservation areas, and water resources that exist in the Central Savannah River Area.

To maximize the benefits from the abundance of natural resources and ensure that these resources will be available for future generations to enjoy, taking the necessary steps to manage and protect these resources cannot be overlooked. Proper management practices will allow for plant and animal species that inhabit these areas to flourish, as well as provide humans with cleaner and healthier air quality from the natural photosynthesis processes. Also, avoiding human interference near water resources will mitigate non-point source, and point-source pollutants from entering the water in addition to limiting the erodibility of the soils that lie along the slopes adjacent to water passages. Furthermore, identification of green spaces and conservation areas in the CSRA also helps in understanding where wetlands and groundwater recharge areas exist in the region that naturally filter storm water runoff in the environment.

After identifying all of the important natural resources that exist in the CSRA, the next goal of this RIR plan is to create a green infrastructure network in the region. The purpose of creating this network is to design an uninterrupted corridor of environmentally important resources that will further emphasize the CSRA's goal in maintaining a healthy community for its residents and environmental habitats. Nationwide, green spaces and greenway networks serve as important recreational areas to communities as well as important wildlife networks that preserve and enhance natural habitats. With this link of green infrastructure, the goal is that there will be an

increase in recreational opportunities as well as extra protection, in the form of buffers, for sensitive habitats and water resources. The CSRA could benefit economically with increased consciousness towards the environment. Green spaces and environmentally friendly communities are often able to attract employers by selling the community on the ability to provide a high quality of life to local residents. In addition to new employment and recreational opportunities, municipalities will also be able to benefit from increased tax revenue and provide better local services for its residents.

Natural Resources: Parks & Forested Areas

Overview:

The Central Savannah River Area benefits greatly from the array of natural resources that are available in the region. Amidst the CSRA's abundance of natural resources, parks and forested areas assume a vital role in the overall health of the ecosystem in the region. While the environmental benefits of these greenspaces are relatively immeasurable, the parks and forested areas are also extremely important to the quality of life for CSRA residents.

Some of the benefits include:

- Shade and shelter from trees and shrubbery that moderate the effects of sun and wind;
- Reduce atmospheric carbon dioxide, produce oxygen, filter pollutants;
- Reduce stormwater runoff, protect the soil against erosion;
- Provide habitats for area wildlife;
- Enhance the aesthetic value of the region;
- Commercially, there is also great value in the amount of wood within CSRA forested areas

The greenspaces throughout the CSRA region also provide for unlimited recreational opportunities for residents and visitors alike, as well as offering economic benefits associated with eco-tourism activities. The parks detailed in this section were nominated with the help of local stakeholders and determined to have a significant regional benefit and will hopefully remain in its current state if not benefit from extra protection measures for future generations to enjoy.

Despite the beauty and the environmental significance of parks and forested areas, their future existence is vulnerable to human interference. A few of the CSRA parks and forested areas are located near areas that have recently been impacted by sprawling residential development (which includes limited commercial development to support new residential areas), and identifying these areas as well as enforcing further development limitations around these regionally important resources is needed. Development does not need to take place within the park to have a negative impact, but increasing the amount of impervious surface outside of the park and increasing the amount of traffic in the area will undoubtedly affect the natural landscape of these

conservation areas. Inter-governmental coordination will be tested and have great importance as the region continues to grow.

After identifying all of the parks and forested areas in the region, these areas will be included and be a major focus of the overall green infrastructure network that is one of the underlying goals of the production of this plan. This network will also include important water resources, cultural and historical resources as well as other resources that will aim to create a better awareness of the resources available in the region and promote better development practices in regards to these resources. Regional stakeholders understand the importance of proper care and management regarding natural resources and are focusing on the long-term quality of life of communities and citizens throughout the CSRA and around the new green infrastructure network.

The State Parks that will be examined are:

- Magnolia Springs
- Elijah Clark
- AH Stephens
- Hamburg
- Mistletoe

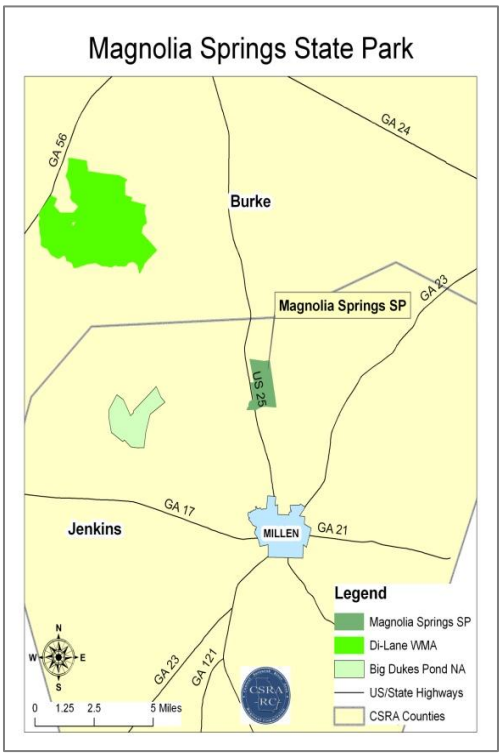
The Wildlife Management Areas that will be examined are:

- Clarks Hill
- Di-Lane
- Yuchi
- Oconee
- Fishing Creek
- Big Dukes Pond
- Broad River
- Phinizy Swamp
- Alexander
- Germany Creek
- Wilkes County
- Soap Creek
- Keg Creek
- McDuffie PFA and Hatchery

Parks & Forested Areas: Magnolia Springs State Park

Overview:

Located only five miles north of Millen, Magnolia Springs State Park (the largest tourism draw to Jenkins County) is best known for its crystal clear springs that flow at an estimated 9 million gallons of water per day. The 1,070-acre park attracts over 100,000 visitors annually and includes three playgrounds, swimming pools, campsites, cottages and numerous historic exhibits. Also, a number of hiking/biking trails greet visitors at Magnolia Springs. Located within just a few minutes walking from the park, the Bo Ginn Aquarium exists and offers easy access to picnickers and other park visitors. It features a variety of fish (catfish, bass, sun-fish) and reptiles (turtles, alligators), some native to the freshwater streams, lakes and swamps of Georgia. Fishing rodeos are available for youth groups.



Map 1: Magnolia Springs State Park regional area

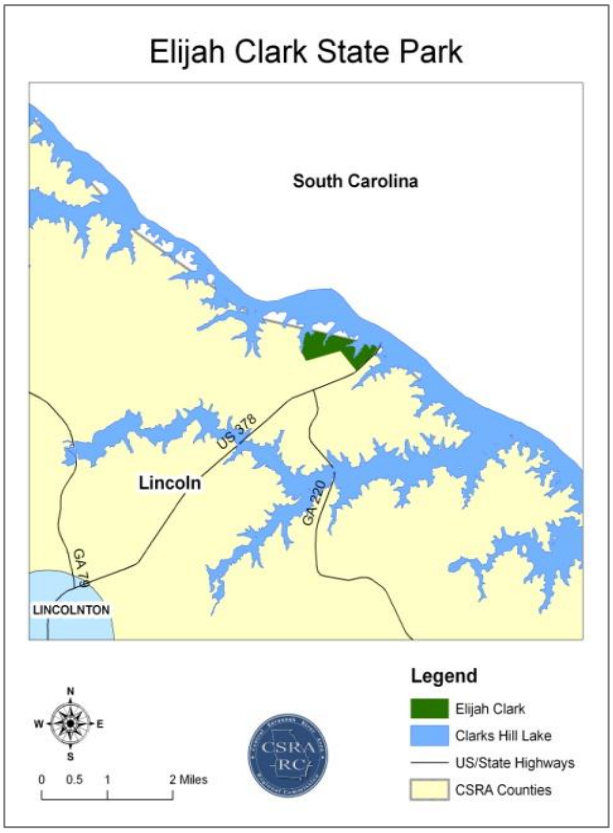
Magnolia Springs State Park also has great historical importance. In the spring of 2010, archaeologists from Georgia Southern University discovered artifacts from Camp Lawton on the property of the Bo Ginn National Fish Hatchery. According to archaeologists the find may be the most pristine Civil War sites to ever be discovered. Camp Lawton was a prison camp constructed by the Confederates during the final days of the Civil War. The camp was abandoned in advance of General Sherman's march to the sea.

Picture 1: Magnolia Springs State Park entrance during Halloween

Parks & Forested Areas: Elijah Clark State Park

Overview:

Along the northwestern shores of Clarks Hill Lake, Elijah Clark State Park extends almost 500-acres along the Georgia/South Carolina border in Lincoln County. There is an infamous recreated log cabin (pictured below) on-site that displays furniture, utensils and tools from the late 18th century where weekend tours are offered to visitors as an educational treat. The name of the park, Elijah Clark, honors the Georgia Revolutionary War hero that led the pioneers to victory at Kettle Creek which was a turning point in the war. The gravesite of Elijah Clark and his wife are located within the park.



Map 2: Elijah Clark State Park regional area

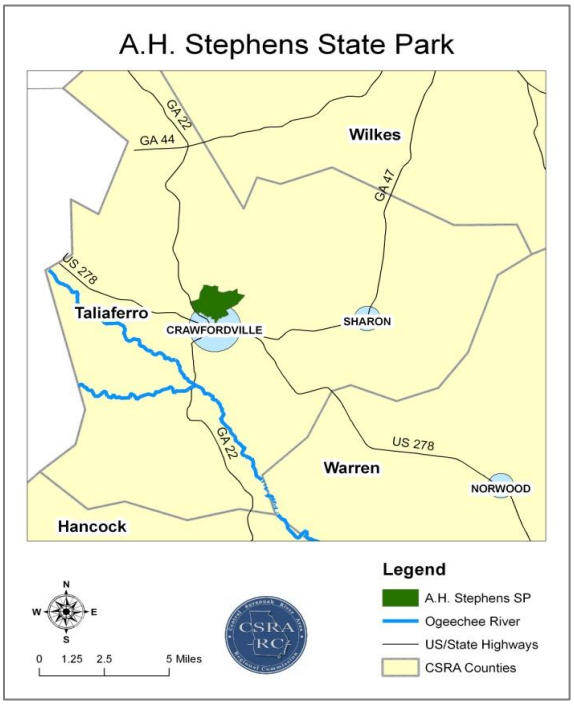
Numerous visitors come to the park to enjoy numerous recreational activities as well as beautiful Clarks Hill Lake. For fishermen, guided fishing trips and boat rentals are available through the park's services. Cottages, camping, picnicking, beaches, trails and miniature golf attracts visitors from near and far to Elijah Clark State Park.

Picture 2: Elijah Clark Museum at Elijah Clark State Park

Parks & Forested Areas: A.H. Stephens Memorial State Park

Overview:

Like many of the other state parks in Georgia, A.H. Stephens is known for its natural beauty as well as the historical resources within the park's boundaries. Named after Alexander Hamilton Stephens, a former governor for the state of Georgia as well as the Vice President of the Confederate States of America, A.H. Stephens State Park is located is the site of the former politician's grave and his home in Crawfordville, Georgia in Taliaferro County. A.H. Stephens State Park spans almost 1,200 acres and is currently registered in the National Register of Historic Places and is maintained by the Georgia Department of Natural Resources.



Map 3: A.H. Stephens Memorial State Park regional area

Liberty Hall, which is the name of Stephens' home, has been renovated to its 1875 style, and is fully furnished to allow visitors to come to the park and tour the house.

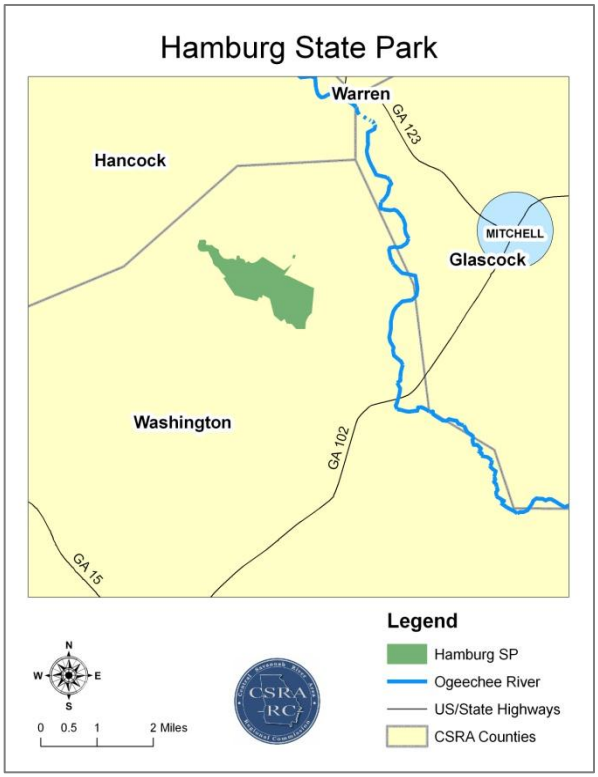
Additionally, the park offers more Confederacy history with its Confederate Museum that boasts one of the greatest collections of Civil War artifacts in the state of Georgia. Other activities available within the park include camping, and picnicking. Sportsmen also visit the park to enjoy the 12 miles of trails used for hiking and horseback riding, fishing, and boating. Annual events like the Heritage Crafts Festival and Christmas as Liberty Hall also attract visitors to A.H. Stephens State Park. Currently, 40,000-50,000 visitors travel to A.H. Stephens State Park annually.

Picture 3: Liberty Hall in A.H. Stephens State Park

Parks & Forested Areas: Hamburg State Park

Overview:

Hamburg State Park, located in northern Washington County, offers visitors an education about the important historical significance of the park as well as a great recreational opportunity. With a 225-acre lake on-site, anglers are attracted to the largemouth bass, crappie, and bream, as well as the boat ramps and fishing pier located along the lake. Campers also flock to the park to enjoy a peaceful and remote location near the lake.



Map 4: Hamburg State Park regional area

Before coming to Hamburg State Park, visitors should call ahead of time to see whether or not the restored (originally constructed in 1921) water-powered grist mill will be operating on that day. The mill is one of three main attractions within the park that visitors often come to see. There is also a museum that displays old agricultural tolls and machinery, as well as an old country store, in addition to a number of recreational activities that are available on-site. The 741-acre State Park also offers camping and picnicking, as well as hiking, fishing and boating for sportsmen.

Picture 4: Water–powered grist mill at Hamburg SP

Picture 5: Hamburg State Park welcome sign

Parks & Forested Areas: Mistletoe State Park

Overview:

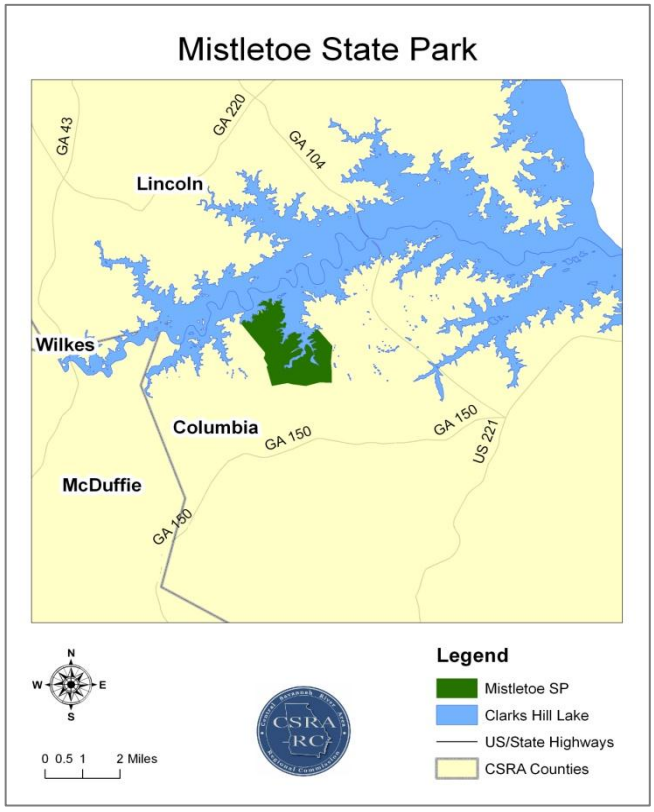
Located on Clarks Hill Lake near Augusta, this nearly 2,000-acre park is known as one of the finest bass fishing spots in the nation. The campground situated on a peninsula, offers spectacular views of both the sunset and sunrise over the open water. The park received its name from Mistletoe Junction, a local area where people gather to pick mistletoe during the winter holidays. This area was once overrun by worn-out farmlands before the construction of Clarks Hill Lake. Today, these lands have been regenerated to mixed pine and hardwood forests, beaver swamps, and hardwood creek bottoms. Evidence of past erosive farming practices are scattered throughout the site and are characterized by what some call 'deeply eroded canyons'.

The diversity of wildlife that lives in and around Mistletoe State Park attracts visitors year-round to Columbia County and the Clarks Hill Lake area. Canadian geese are regularly seen in the many coves of Clarks Hill Lake along with:

- Mallards;
- Ring-necked ducks;
- Wood ducks;
- and Wading birds

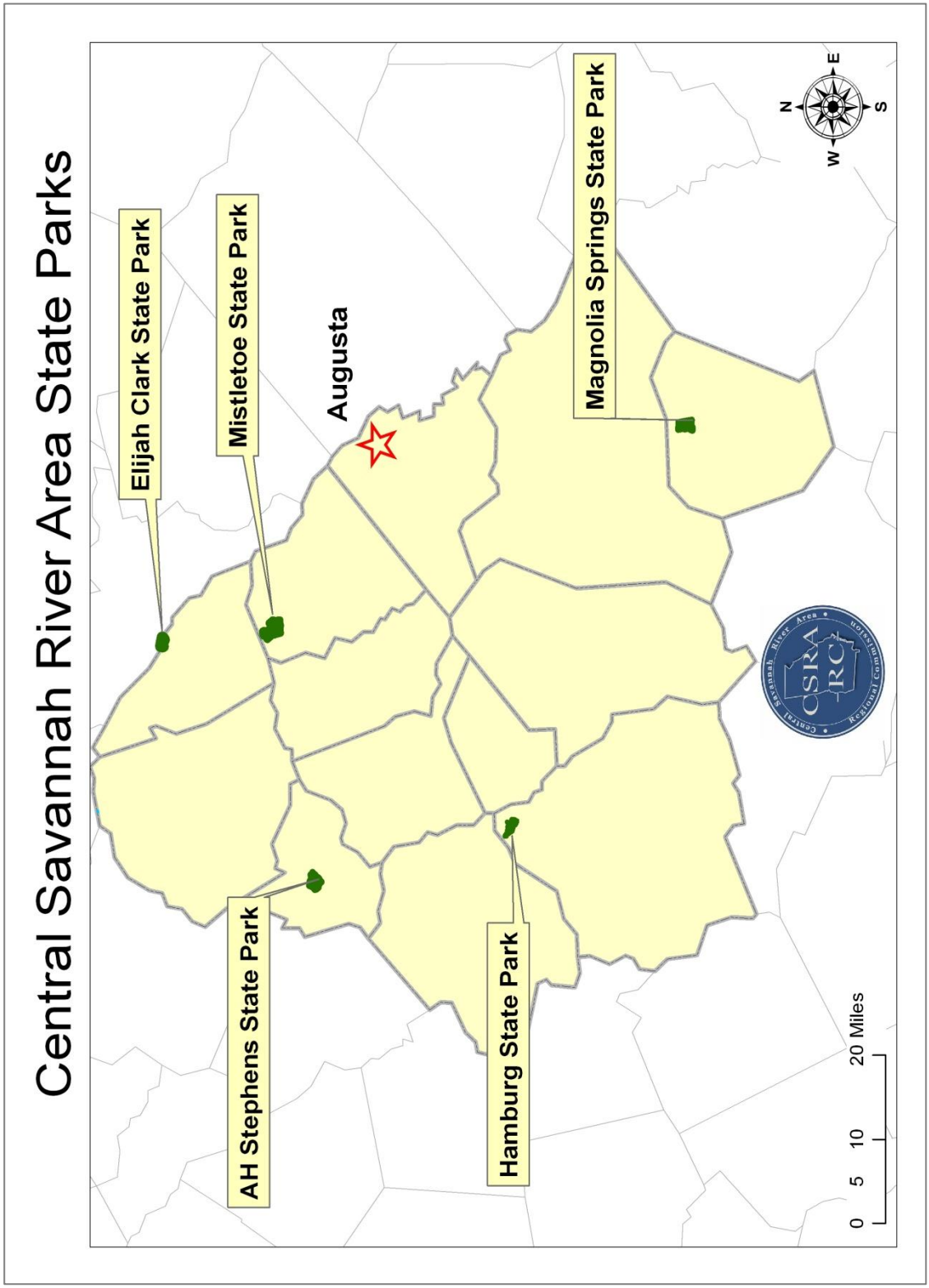
On occasion, visitors will also be able to spot:

- Wild turkeys;
- White-tailed deer;
- Red and gray foxes;
- and numerous songbirds



Map 5: Mistletoe State Park regional area

Picture 6 (left): One of the park entrances at Mistletoe State Park in Columbia County


Central Savannah River Area State Parks
Elijah Clark State Park
Mistletoe State Park
Augusta
Magnolia Springs State Park
AH Stephens State Park
Hamburg State Park
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Natural Resources: Wildlife Management Areas

Overview:

The Georgia Department of Natural Resources (DNR) has identified over 90 Wildlife Management Areas (WMA) throughout the state of Georgia. The state of Georgia is divided into seven regions, and all of the CSRA counties, except for Jenkins County (Region 6), lie within Region 3. The goal of designating thousands of acres as WMAs is to aid in the preservation of natural wildlife habitats and offer an abundance of recreational opportunities for outdoor sportsmen. Wildlife Management Areas are public lands that are visited by thousands of hunters and fishermen every year.

Within the CSRA, DNR has designated 14 Wildlife Management Areas:

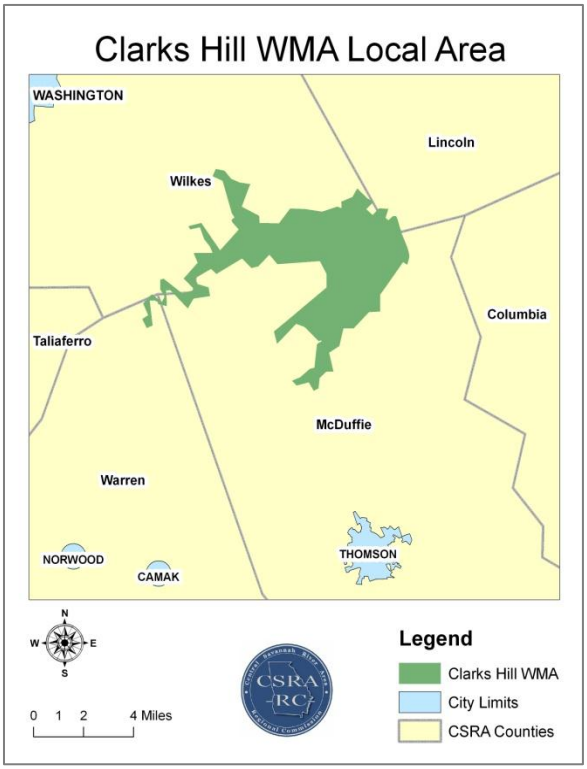
CSRA Wildlife Management Areas and Preservation Lands		
Name	County	Acreage
Clarks Hill WMA	Lincoln, McDuffie, Warren and Wilkes	12,700
Di-Lane WMA	Burke	8,100
Yuchi WMA	Burke	7,800
Oconee WMA	Hancock	4,800
Fishing Creek WMA	Lincoln, Wilkes	2,900
Big Dukes Pond Natural Area	Jenkins	1,700
Broad River WMA	Lincoln, Wilkes	1,500
Phinizy Swamp WMA	Richmond	1,500
Alexander WMA	Burke	1,300
Germany Creek WMA	McDuffie	1,200
Wilkes County WMA	Wilkes	1,000
Soap Creek WMA	Lincoln	1,000
Keg Creek WMA	Columbia	800
McDuffie PFA and Hatchery	McDuffie	600

Table 1: CSRA Wildlife Management Areas and Preservation Lands

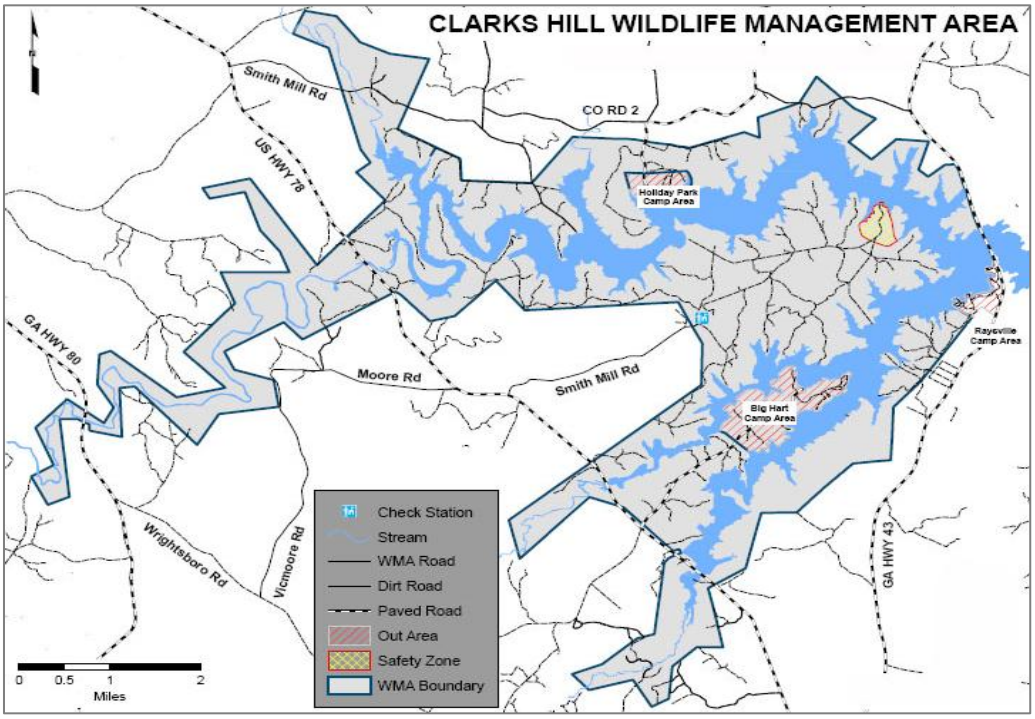
Parks & Forested Areas: Clarks Hill Wildlife Management Area

Overview:

As the largest WMA in the CSRA, Clarks Hill lies within four counties (Lincoln, McDuffie, Warren and Wilkes) and extends almost 13,000 acres. In close proximity to the cities of Thomson and Washington, Georgia, this large tract of land owned and operated by the U.S. Army Corps of Engineers is known as one of the better waterfowl hunting reservoirs in the area. The most common ducks on the lake include ring necked ducks, mallards, gadwalls, teal, and wood ducks. Hunting for wild animals like deer, turkey, fox, bobcat, feral hog, and dove is also common to the Clarks Hill WMA.



Map 7: Clarks Hill WMA Local Area



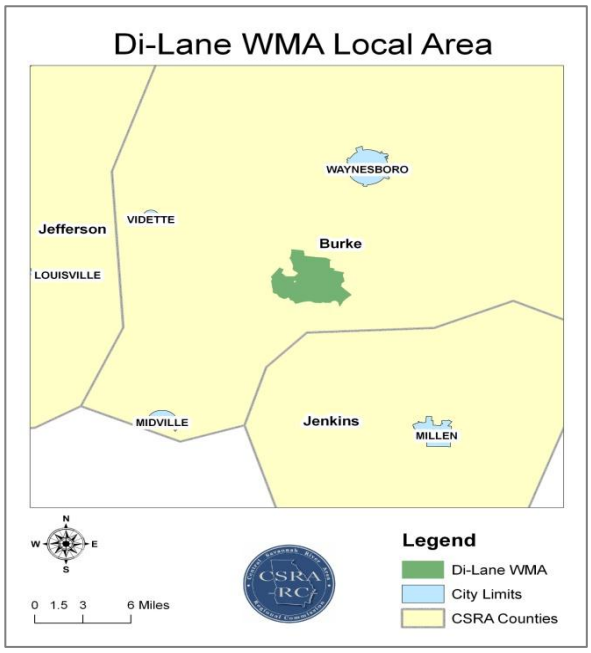
Map 8: The Clarks Hill WMA map displays the boundaries and natural features of the area (Provided by Georgia DNR)

Parks & Forested Areas:
Di-Lane Wildlife Management Area

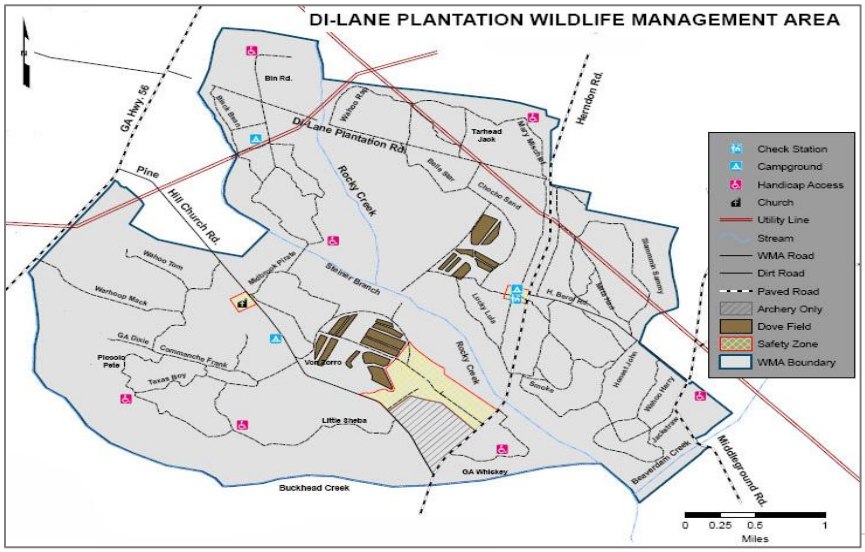
Overview:

Located southeast of Waynesboro and spanning over 8,000 acres in Burke County, Di-Lane WMA is renowned for quail hunting in eastern Georgia. This land was initially purchased by the US Army Corps of Engineers to mitigate the flooding that took place from the Lake Russell development process.

Bobwhite quail is intensely managed on this preserve, and provides an excellent example of how wildlife management practices can be implemented on private lands. Di-Lane is a participant in the Bobwhite Quail Initiative (BQI), and the primary goal of this program is to restore habitat for quail, songbirds, and a variety of other grassland wildlife on private land. Di-Lane also manages some of its land to allow for an ecological process called 'early succession' to take place. Early succession is a land management process where in the early stages the only species that exist are ones that are able to colonize on bare ground. Initially these plant species will survive on the bare ground, but then will be overtaken by other plants that are better suited to the changing conditions. The early succession plants that gradually disappeared are often referred to as herbaceous annuals and perennials, and carry great value to wildlife as food and cover. Di-Lane WMA management attempts to maintain these early plants as they are vital to a quail habitat that has seen a reduction in population in this region in recent decades.



Map 9: Di–Lane WMA Local Area

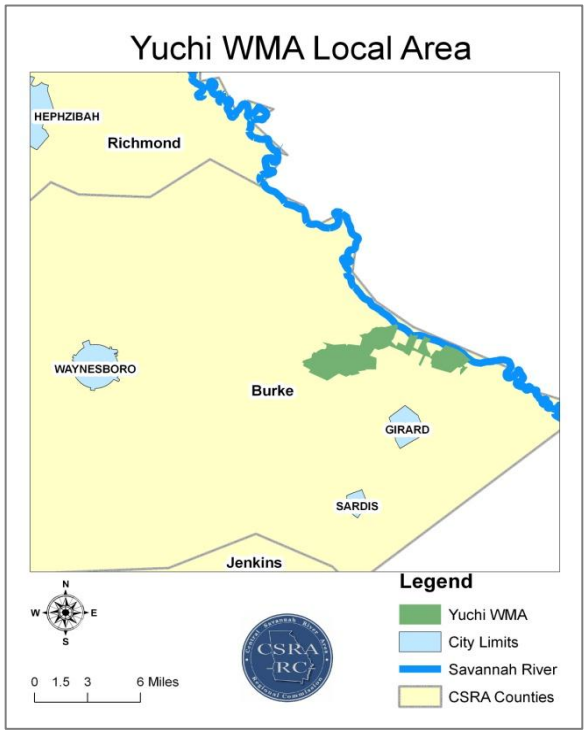


Map 10: A closer look at the Di–Lane Plantation WMA, which is owned and managed by the US Army Corps of Engineers (Pictured left; Courtesy of Georgia DNR)

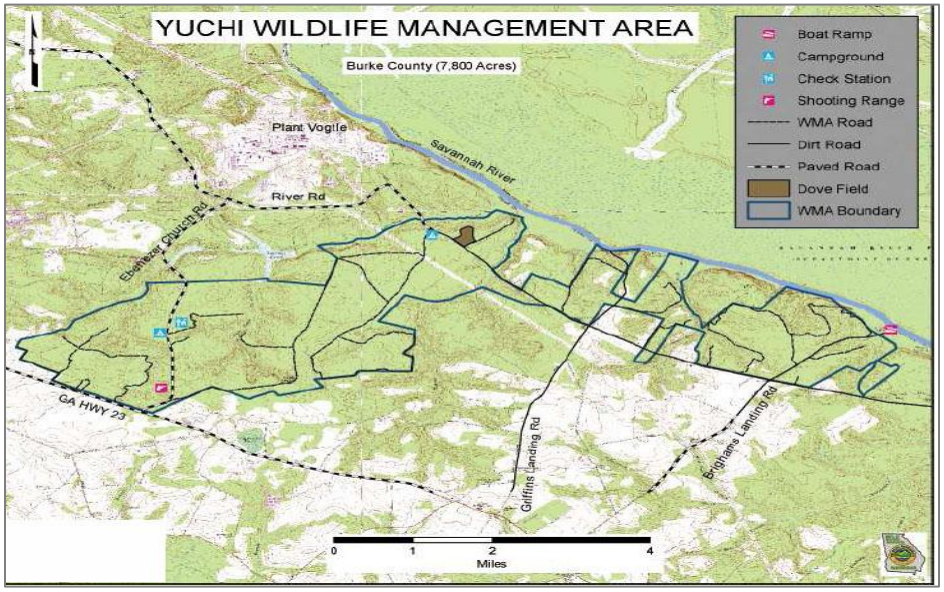
Parks & Forested Areas: Yuchi Wildlife Management Area

Overview:

Identified as an area with significant natural resource value in Burke County, Yuchi WMA is home to a diverse population of wildlife and plant species in addition to being a vital groundwater recharge area for the region. This management area located along the Savannah River, named after the Yuchi Indian tribe that lived in this region of the country, offers 7,800 acres of public hunting land, including 40 acres of planted and maintained dove fields. The preservation site is adjacent to Plant Vogtle in Burke County directly on the Fall Line that marks the change in terrain in eastern the region. To reduce any potential negative impacts from Plant Vogtle to the surrounding landscape, Georgia Power manages a buffer around the Plant site that is consistent to the management practices of Yuchi WMA. Yuchi is also the site of an extensive program to restore the longleaf pine and wiregrass ecosystem that has inhabited this region for centuries. As far as hunting, prime deer, turkey and other small game lure sportsman to Yuchi WMA during hunting season. Yuchi is also the site of a DNR proposed 110-acre lake and public fishing area to be completed in the next few years.



Map 11: Map of Yuchi WMA's Regional Location

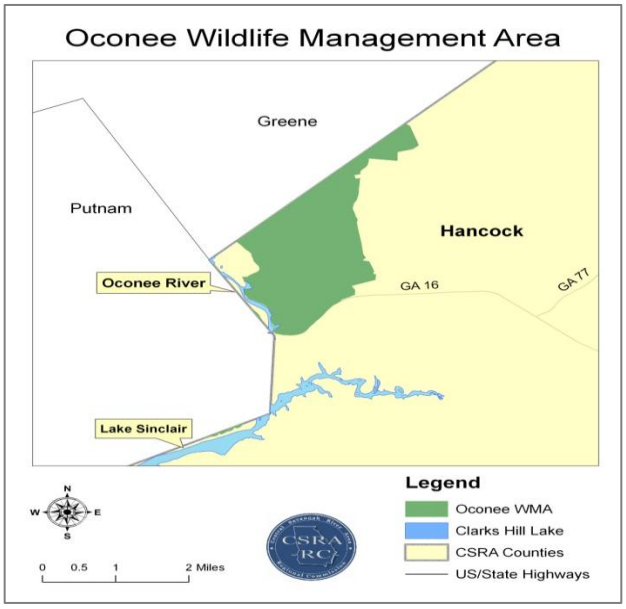


Map 12: A closer look at the Yuchi WMA (Courtesy of Georgia DNR)

Parks & Forested Areas: Oconee Wildlife Management Area

Overview:

The Oconee WMA makes up almost 5,000 acres in Hancock County. Two of the main highlights about the Oconee WMA are the Oconee Waterfowl Area and the Wildlife Education Trail that are both managed by the Georgia DNR Wildlife Division. The Oconee Waterfowl Area is a series of managed impoundments downstream from the dam to maintain water levels and protect wildlife habitat for the waterfowl that live in the area. The Wildlife Education Trail is an excellent natural history learning opportunity that exposes visitors to the unique landscape of the Oconee WMA.



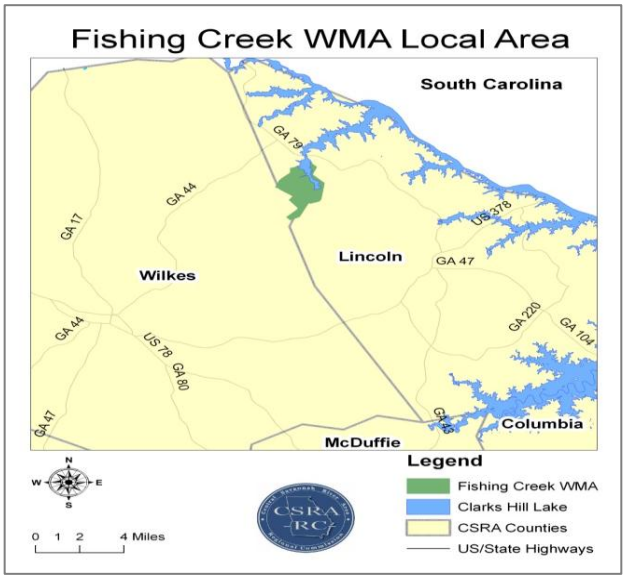
Map 13: Oconee WMA regional area

Picture 7: One of the entrance signs to the Oconee Wildlife Management Area near Wallace Dam

Parks & Forested Areas: Fishing Creek Wildlife Management Area

Overview:

Located in both Lincoln and Wilkes Counties, the Fishing Creek Wildlife Management Area is in close proximity to Augusta residents as well as Clarks Hill Lake visitors. This preservation area offers an abundance of recreational activities to visitors year round while at the same time conserving valuable greenspace in the CSRA region for natural habitats and landscapes. With a series of creeks and streams on-site that are connected to the Savannah River and Clarks Hill Lake system, Fishing Creek WMA did not receive its name by accident. Outdoor sportsmen visit the Fishing Creek WMA year-round to enjoy themselves on this roughly 3,000 acre preservation site.



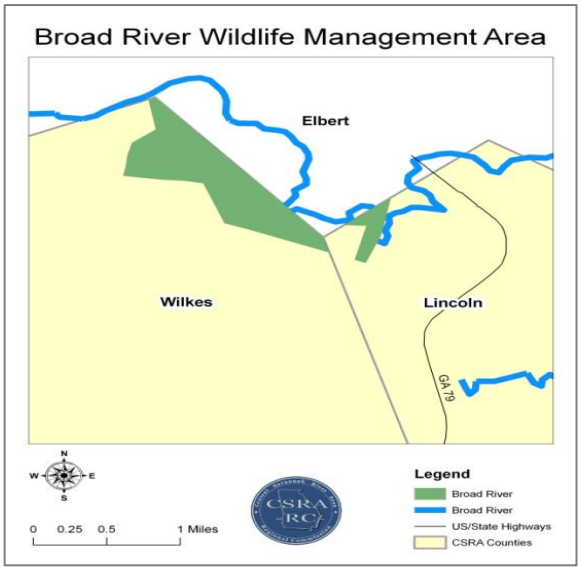
Map 14: Fishing Creek WMA Local Area

Preserving the amount of waterfowl located within the conservation area has not always been easy. In 1991, a construction project went underway to alter the water levels during the spring and summer seasons to increase the moistness of the soils and encourage growth of vegetation along the banks of water sources on the site. Wildlife habitat uses areas like these to breed and survive in the wilderness. The project was successfully completed in 1996; however management continues to monitor sensitive landscapes on-site to help wildlife thrive within Fishing Creek Wildlife Management Area.

Parks & Forested Areas: Broad River Wildlife Management Area

Overview:

Located adjacent to the Broad River in Lincoln and Wilkes Counties, the Broad River Wildlife Management Area offers local residents and visitors great hunting and fishing opportunities in the CSRA. Dove hunting is especially popular on this 1,500 acre tract of land. As shown on the map, the Broad River passes through certain portions of the WMA, which is a major reason why there is an extremely diverse species population on the park's grounds.

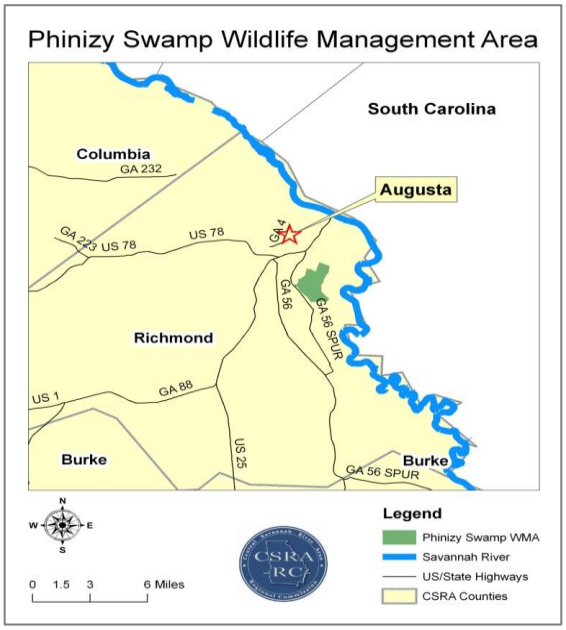


Map 15: Broad River Wildlife WMA

Parks & Forested Areas: Phinizy Swamp Wildlife Management Area

Overview:

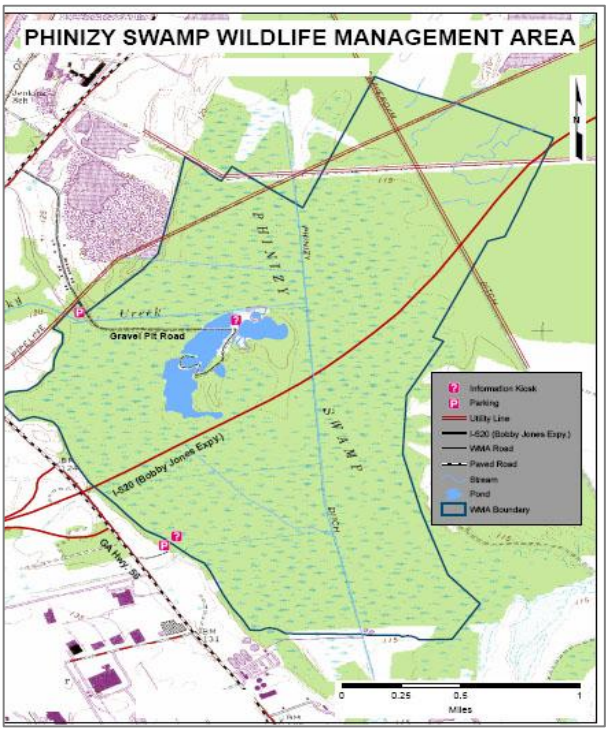
Located in the southern portion of the city of Augusta, Phinizy Swamp Wildlife Management Area is characterized by wetlands that are home to hundreds of acres of flooded timber. The WMA is owned by Georgia Department of Transportation (GDOT) and managed by DNR. The main reason why GDOT is involved with a wildlife management area is because of the construction of an interstate that passes through the protected wetlands. The construction of the Bobby Jones Expressway created a unique situation for GDOT, and they agreed to purchase and preserve the acreage in exchange for approval of the road project by the U. S. Fish and Wildlife Service and the U. S. Environmental Protection Agency. The expressway extension, which



Map 16: Phinizy Swamp WMA is in close proximity to the city of Augusta

opened in the summer of 1998, bisects the wildlife management area.

Phinizy Swamp is unique in that not only does the WMA provide a recreational outlet to visitors, but the Phinizy Swamp Nature Park offers visitors an opportunity to see a variety of wildlife and vegetation in a natural setting. Established in 1999, the park offers education and research opportunities for students and teachers, and gives residents and visitors a chance to interact with nature in many ways. Facilities at the park include seven trails, two observation decks, and a wooden footbridge, and they are operated by the non-profit Southeastern Natural Sciences Academy. Included within the park is an innovative sewage treatment system where semi-treated wastewater from the Messerly Wastewater Treatment Plant flows into a series on man-made wetland cells. There microbes and bacteria break down harmful waste products and the cleansed water then flows back into Butler Creek on its way to the Savannah River. The constructed wetlands clean municipal wastewater, provide habitat for plants and wildlife, and serve as a learning environment for park visitors. The Academy has plans for improvements at the Nature Park including construction of a research facility, visitor's center, and extension of the Floodplain Boardwalk. The Academy is also finalizing an agreement with GDOT and GA DNR to incorporate part of the Phinizy Swamp WMA into its education programs.

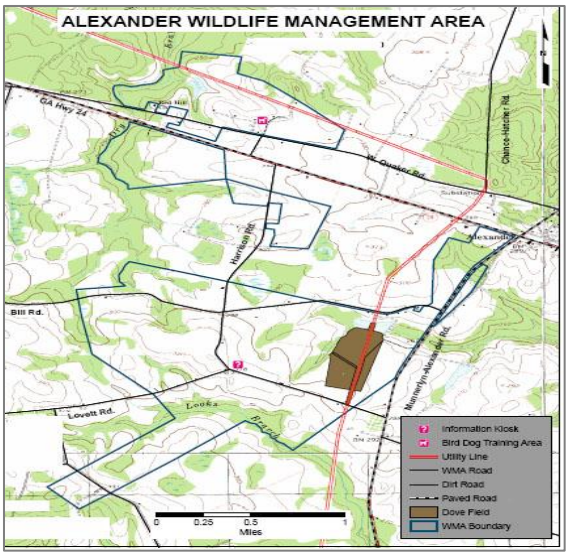


Map 17: A closer look at the layout of Phinizy Swamp WMA

Parks & Forested Areas: Alexander Wildlife Management Area

Overview:

Owned and managed by the state of Georgia, Alexander provides a variety of recreational opportunities on its non-contiguous landscape. Established in 1996, Alexander spans over 1,300 acres in Burke County. Alexander WMA's landscape is best known for the array of pines that exist along with a 20-acre maintained dove field. It allows deer hunting, by archery only, and opportunities for turkey, fox, bobcat, raccoon and opossum.

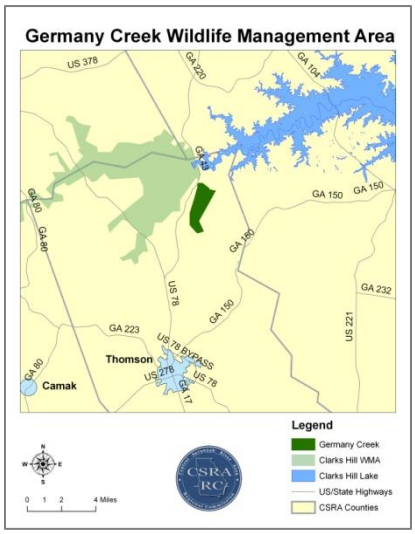


Map 18: Map of Alexander WMA which lies in between Waynesboro and Sardis in Burke County, GA

Germany Creek Wildlife Management Area

Overview:

A lot like all of the other parks that lie along the shorelines of Clarks Hill Lake, Germany Creek Wildlife Management Area is able to boast some of the best fishing and hunting in the CSRA region. Germany Creek WMA is in close proximity to Clarks Hill WMA as well as Mistletoe State Park. To ensure the integrity of Clarks Hill Lake and maintain healthy water quality, it is ideal that conservation agencies have limited the development that takes place around Clarks Hill Lake.

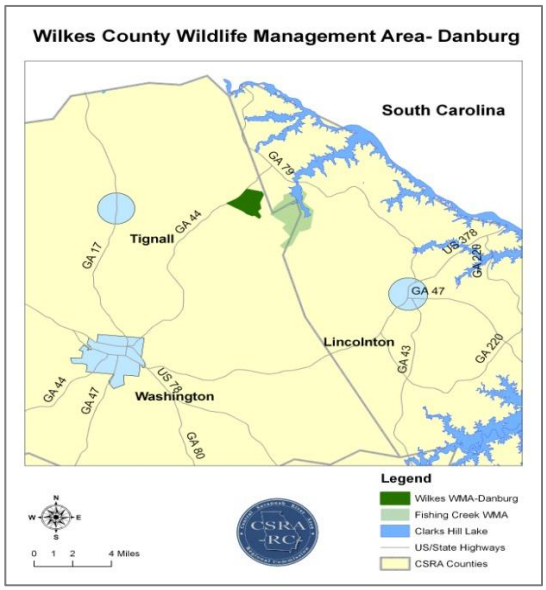


Map 19: Germany Creek WMA regional area

Wilkes County Wildlife Management Area

Overview:

There are two separate parks that make up the Wilkes County Wildlife Management Area, Danburg and Lundberg. The Wilkes County WMA Danburg tract lies close to the Fishing Creek WMA as well as Clarks Hill Lake. The Lundberg Tract is closer to the Taliaferro County border as well as Interstate 20. Both of the Wilkes County WMA tracts are highly recommended by outdoor sportsmen as excellent hunting opportunities. There are a variety of other recreational activities offered as well to families, including: camping, fishing, and hiking.



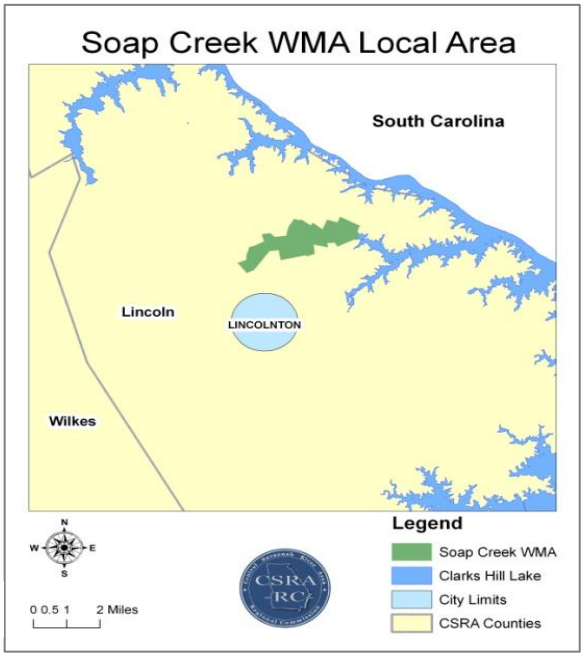
Map 20: Wilkes County WMA–Lundberg regional area

Map 21: The Wilkes County WMA–Danburg is close to Fishing Creek as well as Clarks Hill Lake

Soap Creek Wildlife Management Area

Overview:

Known for its abundance of Striper Fish, Soap Creek Wildlife Management Area provides outdoor sportsmen with a great experience in Lincoln County. Located in close proximity to Lincolnton, CSRA residents and nearby South Carolina residents have a chance to not only enjoy the great hunting within Soap Creek WMA's grounds, but also partake in water activities on Soap Creek as well as Clarks Hill Lake.

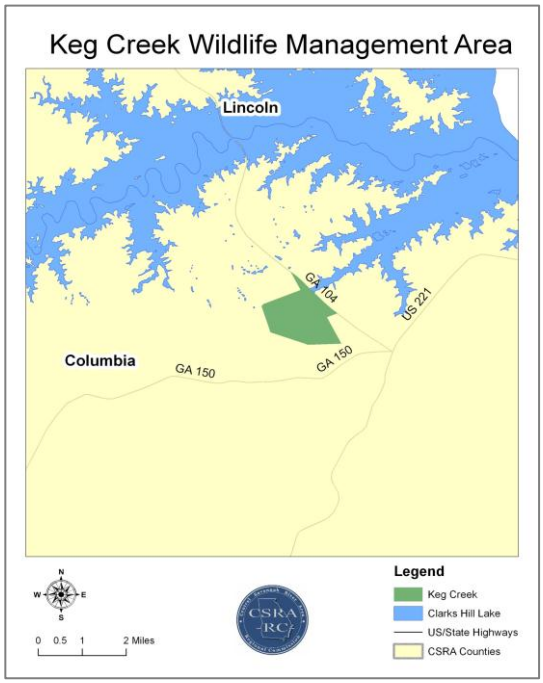


Map 22: Soap Creek WMA lies along the shores of Clarks Hill Lake in Lincoln County, Georgia

Keg Creek Wildlife Management Area

Overview:

Adjacent to Clarks Hill Lake, the U.S. Army Corps of Engineers jointly manages the Keg Creek Wildlife Management Area that is frequently visited by fishermen and hikers. This 800-acre site in Columbia County hasn't felt a great amount of development pressure due to strict management practices by the U.S. Corps of Engineers. The Keg Creek bike trail is one of the main attractions to visitors. Walking, running, hiking and biking along the trail are all acceptable. However, if pedestrian usage continues to increase on the trail, there is some fear that degradation of the trail due to erosion could become an issue in the near future.

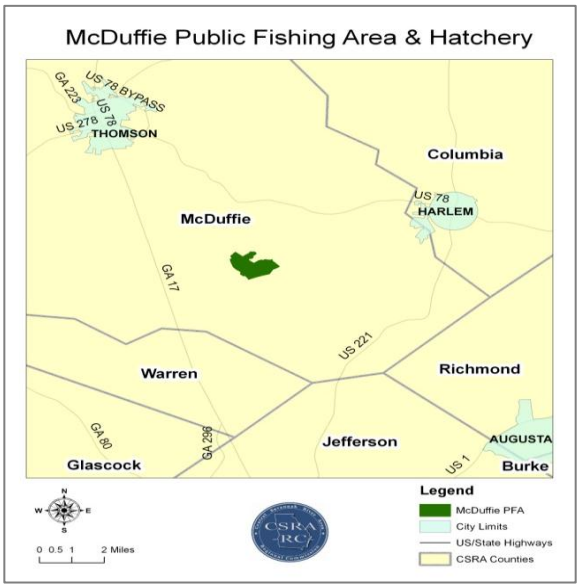


Map 23: Keg Creek Wildlife Management Area's location within the CSRA region

McDuffie PFA and Hatchery

Overview:

The McDuffie Public Fishing Area located within minutes of Thomson, Georgia in McDuffie County, offers fishermen thirteen ponds to choose from ranging from just over 5 acres in size to over 30 acres. The McDuffie PFA is truly inviting to visitors with numerous access points to the waterfront, a small campground, and is the site of the McDuffie Environmental Education Center. Hunting is also permitted within the McDuffie PFA grounds with dove and waterfowl hunting being allowed to take place during certain seasons.



Map 24: McDuffie PFA & Hatchery regional area

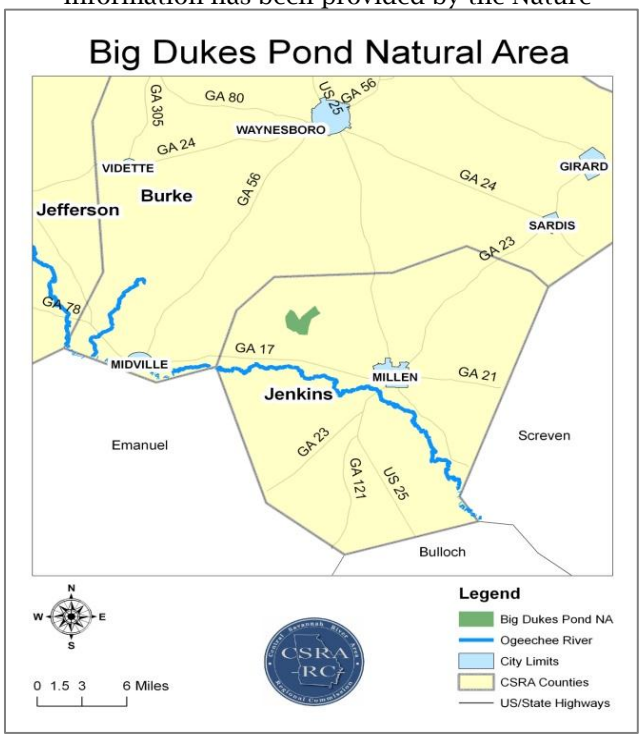
The McDuffie Environmental Education Center (MEEC) previously mentioned offers a rare hands-on educational opportunity for students to learn about the outdoors on this ecologically diverse landscape. The MEEC offers to educate students along three diverse habitats and trails, a hands-on self-directed discovery room, and several other outdoor classroom areas. The MEEC is a collaboration between the McDuffie County Board of Education, Georgia Department of Natural Resources, Educational Technology Training Center - Fort Discovery, National Science Center - Fort Discovery, CSRA Resource Conservation and Development Council (RC & D), the Watson-Brown Foundation and CSRA RESA.

Big Dukes Pond Natural Area

Overview:

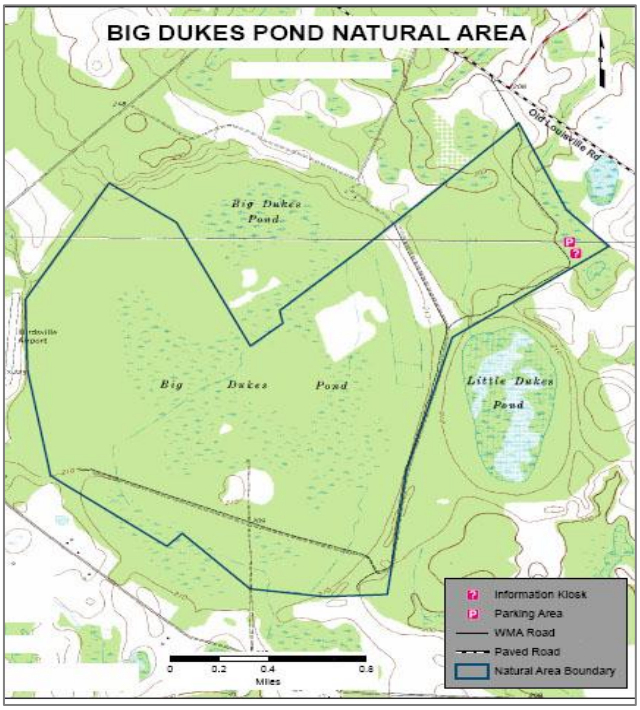
Considered a Carolina Bay, Big Dukes Pond Natural Area is over 1,500 acres located near Millen, GA in Jenkins County. This land area was originally donated by Kimberly-Clark Corporation to the Nature Conservancy to initiate Big Dukes Pond's protection from human disturbance. The actual bay only spans about 130 acres, and is characterized by several open, pond-like areas contain a diverse blend of ferns, grasses, sedges, fragrant water lilies shrubs, and vines. The ponds and their lush vegetation provide an important breeding and foraging habitat for a wide range of animal and bird life.

*Information has been provided by the Nature Conservancy of Georgia

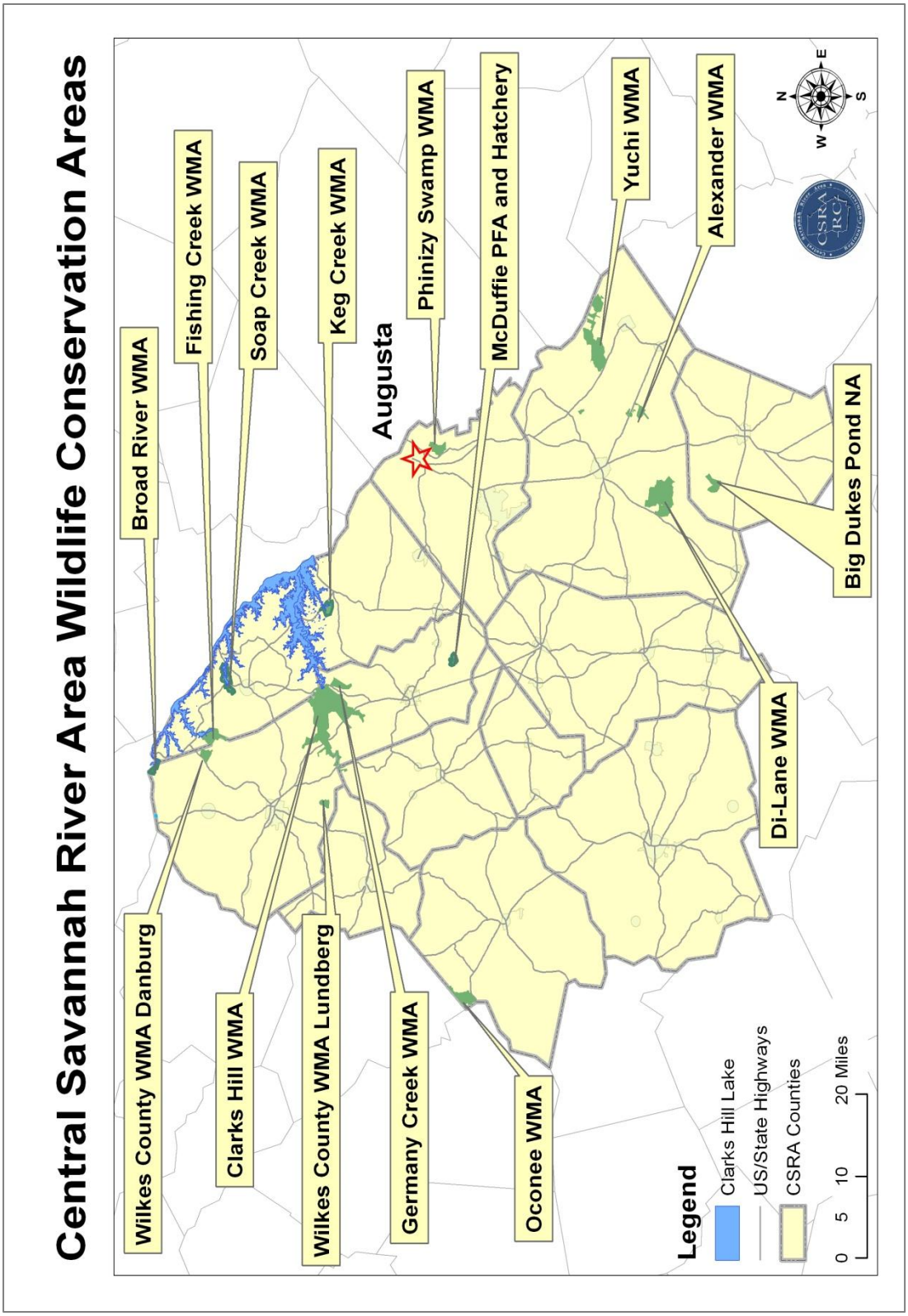


Map 25: Big Dukes Pond Natural Area regional map

Visitors are overwhelmed by the amount of wildlife that inhabits Big Dukes Pond. Local nesting birds include the broad-winged hawk, great egret, Mississippi kite, and yellow-crowned night-heron. Great blue herons and anhingas also nest in Little Duke's Pond. Endangered wood storks, the only storks native to North America, also nest just outside the preserve. American alligators and several species of snakes move silently through the water and undergrowth, while the croaking of 15 species of frogs can be heard in the still air.



Map 26: A closer look at Big Dukes Pond Natural Area



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Natural Resources: Kaolin

Overview:

As one of the most valuable natural resources in the region, Kaolin creates an industry in the state of Georgia that is stated to be worth more than $1 billion annually. Georgia is recognized as a world leader in the mining, production, processing, and application of kaolin products. Kaolin is generally across the middle of the state extending from Augusta to Macon to Columbus. This straight line of Kaolin deposits exists along this straight line spanning across the middle of Georgia because it is found along the boundary separating the Piedmont and the Coastal Plain regions.

There are three types of Kaolin deposits: “(1) "soft" kaolin, which There are breaks easily and is soapy in texture; (2) "hard" kaolin, which is more finely grained, difficult to break, and jagged in texture; and (3) "flint" kaolin, which has no commercial value because its high opaline silica content makes it extremely hard” (Information provided by the New Georgia Encyclopedia). Kaolin mining activities is not considered extremely deep mining, and takes place less than 150 meters from the surface of the land.

Picture 8: Kaolin Mine

Kaolin is used in:

- Paper-coating industry
- Filler (added to plastics, for example, and rubber compounds)
- Pigment additive in paints
- Ceramics (tile, chinaware, and bathroom toilets and sinks)
- Pharmaceuticals

Picture 9: “Hard” Kaolin

Natural Resources
Appropriate Development Practices

Overview:

The following best management practices are recommended, when applicable, for use by developers and landowners in designing new developments to be located within one mile of the Regionally Important Parks and Forestry Resources identified in this section, and depicted on the Regionally Important Resources Map. This listing will also be used by the CSRA Regional Commission for reviewing Developments of Regional Impact (DRI) located within one mile of these resources.

- Develop large-lot suburban residential with all structures served by an on-site sewage management system.
- Establish supportive commercial development to serve the residential development that may be on stand-alone sites or possibly be within a large mixed-use development.
- Link new developments to existing residential areas via a trail and/or greenspace system.
- Survey the environmental features of the development site including topography, soils, hydrology, trees and vegetation, wildlife habitats, and historical and cultural sites. Seek to preserve the sensitive areas identified in the survey by setting them aside as parks, trails, and greenbelts.
- Establish aquatic buffers (beyond the minimum required by state law) that serve as natural boundaries between local waterways and new development and to protect on-site wetlands.
- Limit the proportion of the site that can be covered in impervious roofs and pavements.
- Limit pavement in cul-de-sacs and consider replacing it with vegetated soil that reduces runoff and provides water infiltration and treatment.
- Utilize porous pavement materials wherever possible to allow underlying soil to absorb rainfall and treat pollutants.
- Construct vegetated swales as a replacement to curbs or drainage pipes.
- Construct bio-retention areas or rain gardens in parking lot islands or within small pockets of residential areas.
- Limit clearing, grading, and disturbance to those areas that construction actually requires to preserve existing trees and soils that attenuate, treat, and infiltrate rainfall and runoff.
- Utilize cluster development to preserve open space and natural features on the development site.

- Utilize single-family detached dwellings within conservation subdivisions and passive recreation areas.
- Reduce street width and curbing and limit parking to what is actually necessary.
- Establish extensive nature landscape buffers along the periphery of the development site.
- Site plans and building design should be sensitive to the natural features of the site including woodlands, steep slopes, wetlands, and floodplains.
- Provide greater design flexibility in the siting of services and infrastructure so as to reduce the amount of paving required.

Natural Resources
General Policies and Protection Measures

Overview:

What follows is a list of general policies and protection measures that are intended primarily as guidance for local governments in planning and decision-making that affects the Regionally Important Parks and Forestry Resources identified in this plan. In addition, the CSRA Regional Commission will use these policies and protection measures when reviewing local comprehensive plans for consistency with regional plans, and to encourage local governments in the region to adopt the policies and enhancement activities most appropriate for the protection of the resources located within their communities.

The protection and conservation of the Regionally Important Parks and Forestry Resources will play an important role in making decisions about future growth and development in the community.

There is commitment to create safe and attractive neighborhoods in all areas of the community with particular attention to those areas that impact on Regionally Important Parks and Forestry Resources.

- More compact urban development will be encouraged in order to preserve the Regionally Important Parks and Forestry Resources.
- Development that is sensitive to the historic context, sense of place, and overall setting of the community will be encouraged.
- Preserving the rural character and providing opportunity for agricultural, parks, and forestry activities is vitally important to the community.
- New land uses that contribute to protecting the environment and preserving meaningful open space are supported in the community.
- The creation of passive recreation opportunities and the set-aside of greenspace are important to the community.
- The institution of green infrastructure and other techniques to protect the Regionally Important Parks and Forestry Resources will be promoted in all new developments and redevelopments.
- Educating the public on the benefits and practices of environmental stewardship through the use of various education and communication tools will be promoted.
- Mechanisms to provide comment on and to assess the impact of proposed land development activities located within a mile of the Regionally Important Parks and Forestry Resources will be promoted.

- The application of environmental protection strategies, such as transfer development rights, conservation easements, fee simple acquisition, conservation tax credits, etc., will be utilized wherever possible to protect and preserve the Regionally Important Parks and Forestry Resources.
- Amend existing or create new land development ordinances that will:

    1. Implement the recommended development guidelines and patterns from the recently adopted Comprehensive Plans;
    2. Encourage the development of cluster subdivisions that feature walking/ bicycle trails, passive parks, and greenbelts;
    3. Establish larger buffers than which are required under state law between local waterways and new development;
    4. Establish significant natural landscape buffers at the periphery of the Regionally Important Parks and Forestry Resources for new development and redevelopment activities;
    5. Limit the amount of parking to the absolute minimum necessary for the particular land use;
    6. Limit the street width and curbing only to that absolutely necessary for each street's specific function;
    7. Limit clearing, grading, and disturbance to those areas that construction actually requires;
    8. Require developers of housing and mixed-use developments that meet the DRI threshold to survey the environmental features of the development site including topography, soils, hydrology, trees and vegetation, wildlife habitats, and historical and cultural sites, and preserve the sensitive areas identified in the survey by setting them aside as parks, trails, and greenbelts;
    9. Establish incentives for developers to think "green" in their design of residential, commercial, and mixed-use developments.

- Amend existing storm water management ordinances that will require developments within one mile of Regionally Important Parks and Forestry Resources to:

    1. Limit the proportion of the site that can be covered in impervious roofs and pavements;
    2. Limit pavement in cul-de-sacs and consider replacing it with vegetated soil that reduces runoff and provides natural infiltration and treatment;
    3. Allow the construction of vegetated swales as a replacement to curbs and drainage pipes;
    4. Allow the use of porous pavement materials wherever possible to allow underlying soil to absorb rainfall and treat pollutants; and

5. Allow the construction of bio-retention areas or rain gardens in parking lot islands or within small pockets of residential areas.

- Develop a greenspace plan that will identify and prioritize key lands for acquisition within one mile of Regionally Important Resources (Parks and Forestry and Water).
- Participate in the Georgia Land Conservation Program, Conservation Tax Credit Program, Land and Water Conservation Fund Program for acquisition (fee simple or easements) of priority conservation areas identified by the greenspace plan.
- Explore and expand partnerships with land trusts, other conservation organizations, and neighboring local governments as a means of permanently protecting the priority areas identified by the greenspace plan.
- Explore the adoption of a Transfer Development Rights ordinance that will allow for the transfer development away from the priority areas recommended in the greenspace plan to those sections of the community where the future development plan calls for more intensive use and the necessary infrastructure (water, sewer, and roads) to be in place to accommodate this growth.
- Establish a community environmental awareness and stewardship education program, involving citizens, builders, and developers, which hold as one of its objectives, establishing an understanding of the importance to protect the Regionally Important Parks and Forestry Resources in the community and how the general public can participate in efforts to protect such resources.
- Establish a formal coordination process that would allow for the review and comment by affected parties on proposed development activity located within a mile of Regionally Important Parks and Forestry Resources.
- Sponsor, in coordination with the managers of the Regionally Important Parks and Forestry Resources, an annual Great American Clean-up event designed to beautify and eliminate litter around these resources.

Water Resources

Overview:

Identifying and protecting water resources in the Central Savannah River Area is crucial to the long-term health, safety and welfare of residents throughout the thirteen-county region. Stakeholders throughout the region and the CSRA Regional Commission have identified important water sources that exist in the CSRA that may be important for:

- Stormwater Management
- Drinking Water
- Recreational Activities
- Preservation of Natural Habitats
- Hydroelectric Power

The water sources that have been identified are either classified as Protected Rivers by the Georgia Department of Natural Resources, Environmental Protection Division (EPD) or are man-made lakes that have been designed to create significant regional importance with flood mitigation, hydroelectric power or recreational value for CSRA residents. A river that is considered part of the River Corridor Protection Act is defined by EPD as:

"The Act is administered by the Environmental Protection Division. All rivers in Georgia with an average annual flow of 400 cubic feet per second are covered by the Act, except those within the jurisdiction of the Coastal Marshlands Protection Act. Some of the major provisions of the Act include: requirements for a 100-foot vegetative buffer on both sides of rivers; consistency with the Georgia Erosion and Sedimentation Act; and local governments must identify river corridors in land-use plans developed under their respective comprehensive planning acts… The plan provides for construction of road crossings, acceptable uses of river corridors, maintenance of a vegetative buffer along the river for a minimum of 100 feet from the river's edge (residential structures are allowed within the buffer zone), timber production standards, wildlife and fisheries management, recreation, and other uses."

River Protection corridors are just one of the natural resources the Georgia DNR classifies as a State Vital Area. Other natural resources include: water supply watersheds, wetlands, groundwater recharge areas, and protected mountains. While protected mountain areas are not found in the CSRA, the other four elements do exist in the region.

Protection of the water supply watersheds are of the utmost importance to local stakeholders. A watershed can be defined as an area where all of the water that falls to the ground or exists under the land flows into the same water resource. A change in natural terrain or topography is what determines what waterway drainage will flow into. Not only does protecting the water supply affect drinking water in the region, but also declining water quality can result in loss of aquatic species due to their deteriorating habitat.

Wetland preservation is also a concern to community stakeholders. Limiting development in wetland areas is important for shoreline protection and erosion, water storage and natural flood mitigation, protection of the sensitive plant and wildlife that inhabits and uses wetland areas, and these areas also help filter contaminants and sediments that enter water sources.

A groundwater recharge area is typically an undeveloped landscape where water is able to penetrate the earth's surface to replenish an aquifer. These surface areas are considered to be highly permeable, and are important for stormwater management and natural water filtration. A majority of the groundwater recharge area that exists in the CSRA replenishes the Cretaceous-Tertiary Aquifer System that spans across the entire middle area of the state.

Overall, CSRA residents are able to enjoy excellent water quality and the abundance of water-related recreational opportunities that are available in the region. For most of the region, development pressures around water resources have been limited. However, waterfront construction is attractive to numerous developers and best management practices need to be enforced around regional water resources. Collaboration efforts are necessary amongst all stakeholders to enhance and protect water resources to provide safe and clean water to future generations.

Water Resources: Clarks Hill Lake

Quick Facts:

Location: Columbia, Lincoln, and McDuffie Counties

Constructed: 1954

Source: Savannah River

Owner/Operator: U.S. Army Corps of Engineers

Picture 10: Sunrise at Clarks Hill Lake

Geography and Value:

Clarks Hill Lake, also known as Lake Thurmond in the state of South Carolina, is the largest Army Corps of Engineers east of the Mississippi River. Within the CSRA, Clarks Hill Lake lies within Columbia and Lincoln Counties and was created by the construction of the J. Strom Thurmond Dam (Seen in Picture 2). Clarks Hill Lake is one of three manmade lakes that are strung together along the Savannah River. The other two lakes were also U.S. Army Corps of Engineers projects as well; Lake Russell and Lake Hartwell.

The J. Strom Thurmond Dam (Seen in Picture 2), located along the Georgia and South Carolina state line, lies within Columbia County and serves the region with hydroelectricity, flood control, irrigation, and aids in navigation. Clarks Hill Lake has about 1,200 miles of total shoreline, and more than half of that resides in Georgia, with about one-third of that total in Lincoln County.

Picture 11: J. Strom Thurmond Dam

Picture 12: Overhead view of Clarks Hill Lake

Reintroduction of white-tailed deer, Canadian geese, and Eastern wild turkey in the 1950's through the 1970's was one of the first wildlife management projects to take place around Clarks Hill Lake. Recently, there has been a more conscious effort in protection of rare and threatened species in and around the lake and spotting a Southern Bald Eagle or neotropical birds is now more commonplace. Unique to the region is the Bussey Point Management Area in Lincoln County. Bussey Point is a 2,400+acre peninsula that is designated for limited development and is home to an abundance of naturally wooded areas with a number of hiking trails as well as picnic areas and primitive camping.

Recreation:

Clarks Hill Lake has continued to attract more and more visitors annually, reaching the 6,000,000 plateau in recent years. Clarks Hill Lake serves many local residents with a variety of recreational activities including; boating, swimming, camping, golfing and fishing. In May 2010, Clarks Hill Lake was proud to host a Bassmasters Elite Series event, "The Pride of Georgia", and has hosted numerous other local and national fishing tournaments in past years as well.

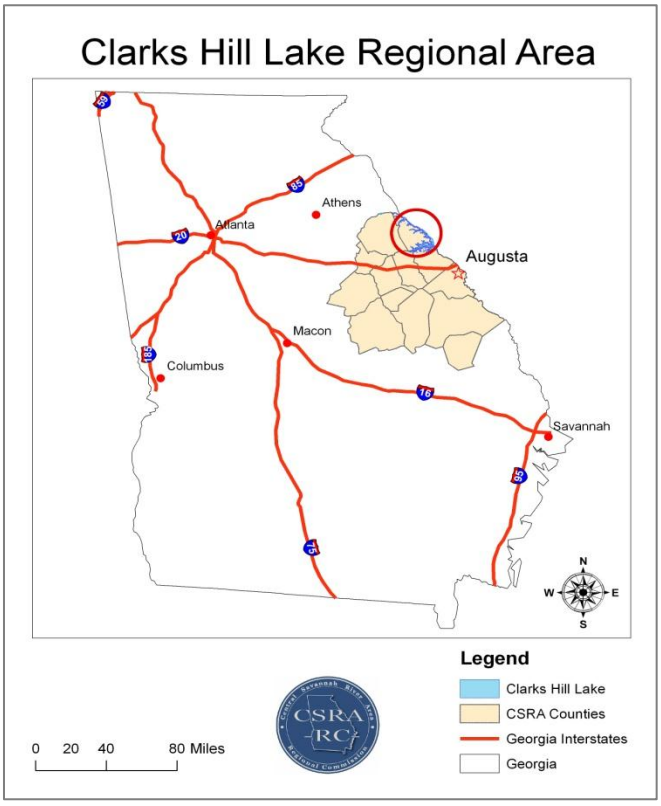
Picture 13: Photo Courtesy of ESPN from the stage at "The Pride of Georgia" Bassmasters event at Clarks Hill Lake

Picture 14: One of the many coves that exist on Clarks Hill Lake

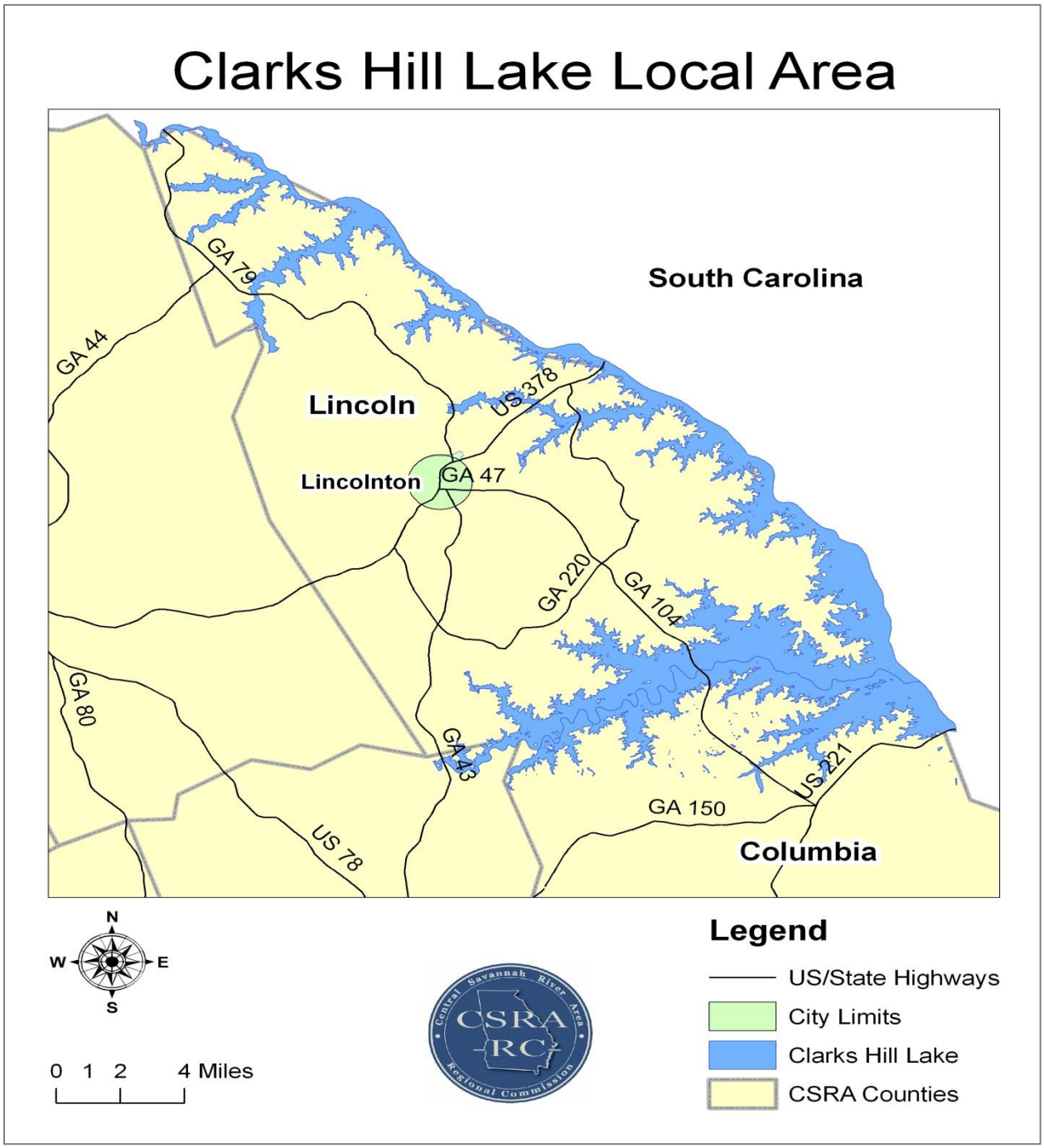
Vulnerability:

Clarks Hill Lake has seen an increase in impervious surface around the lake as a growing amount of residential development has taken place in recent years. A rise in the amount of impervious surface near Clarks Hill Lake can potentially damage the environment by increasing the percentage of erodible soils around the lake and increasing storm water runoff which may contain harmful pollutants. Like most areas that aren't in an urban setting, a significant portion of residential dwelling units around the lake are on a septic sewage system and the older septic storage units must be checked and maintained routinely to avoid leakage into water sources. With Clark Hill Lake draining into the Clarks Hill Reservoir, drinking water quality for thousands or even hundreds of thousands of eastern Georgia residents is dependent on the cleanliness of the lake, so protecting all water sources in the area is pertinent. The buffer requirements set for by the Georgia Environmental Protection Division (EPD) within the Georgia Department of Natural Resources (DNR) are minimum standards for protecting Georgia's water resources, and these should be enforced along with the standards and policies set forth by the US Army Corps of Engineers.

Map 28: Clarks Hill Lake regional area



Map 29: Clark Hill Lake's proximity to major urban areas in Georgia



Map 30: Clarks Hill Lake local geography

Water Resources: Lake Sinclair

Quick Facts:

Location: Hancock County

Constructed: 1953

Source: Oconee River

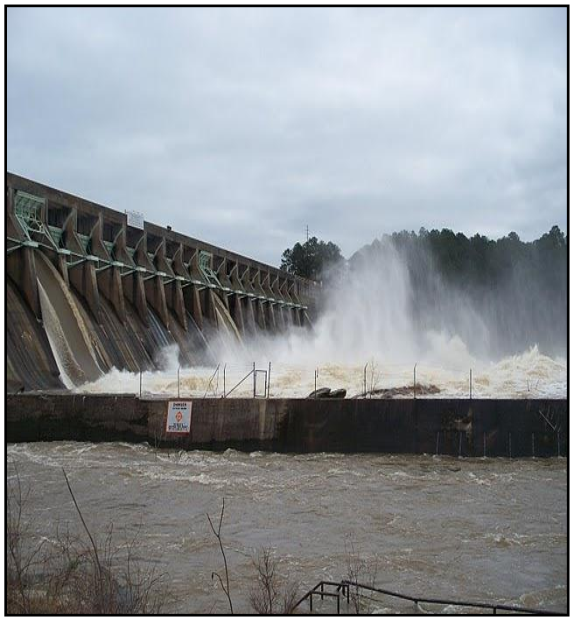
Owner/Operator: Georgia Power Company

Geography and Value:

While much of Lake Sinclair is located outside of the Central Savannah River Area, the lake still serves as a great recreational resource for many CSRA residents and visitors to the region. Located along the western border of Hancock County, Lake Sinclair is located along the fall line of the Oconee River and has almost four miles of shoreline in Hancock County.

The Wallace Dam, located along the Hancock County Border (Seen in Picture 16 and in Map 32), and the Lake Sinclair Dam operate in synch with each other to stabilize the manmade Lake Sinclair. By damming the Oconee River, Lake Sinclair is not only able to provide recreational outlets for CSRA residents, but also provides a significant amount of hydroelectricity for Georgia Power consumers. As Lake Sinclair continues to attract year-round residents and new vacationers, the ability for Lake Sinclair to provide an attractive and efficient power source in the region becomes increasingly more important.

Picture 15: Sunrise at Lake Sinclair



Picture 16: Wallace Dam is owned and operated by Georgia Power Company and provides hydroelectric power while at the same time creating a beautiful manmade Lake Sinclair

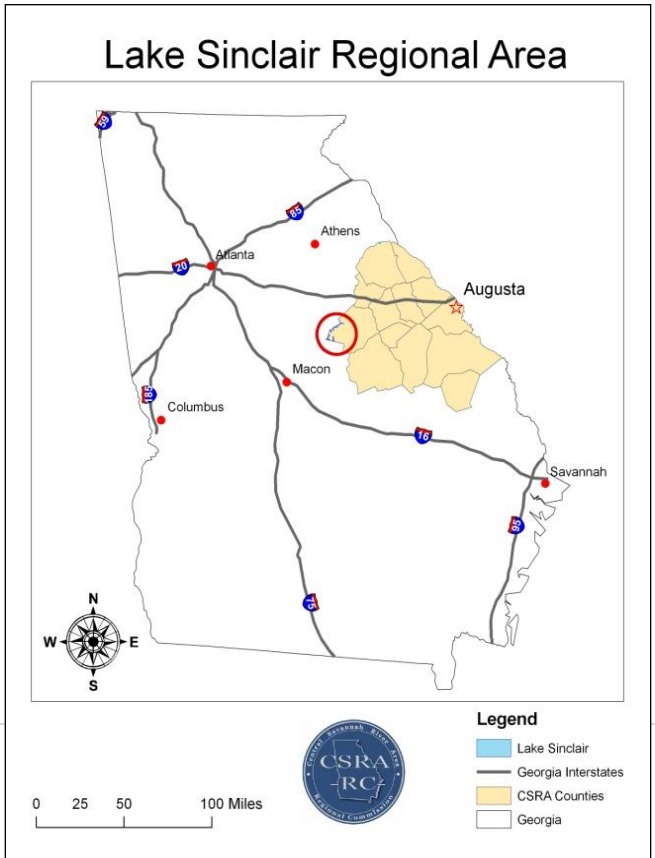
Recreation:

Lake Sinclair hosts a number of nationally recognized and local fishing tournaments each year and is visited by thousands of tourists annually. Widely regarded as a great fishing destination in the Georgia region, Lake Sinclair is home to:

- Channel Catfish
- Bullhead Catfish
- White Catfish
- Black Crappie
- Largemouth Bass

Picture 17: This photo is courtesy of georgiainfo.com, and is a picture of a Georgia Power Hydroelectric facility along Lake Sinclair in Milledgeville, Georgia. Although Milledgeville is outside of the CSRA, this Georgia Power facility is the reason why Lake Sinclair exists in the first place

- White Bass
- Bluegill
- Redear

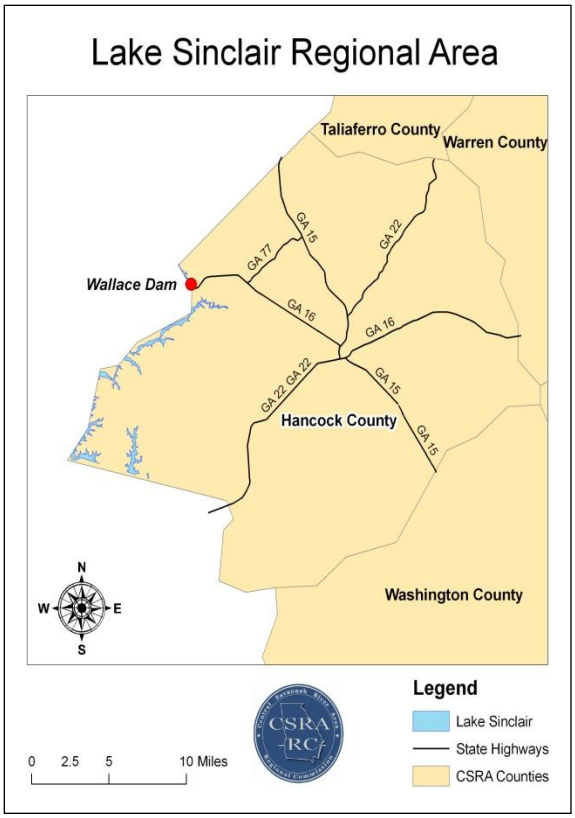


Map 31: Lake Sinclair's proximity to urban areas in Georgia

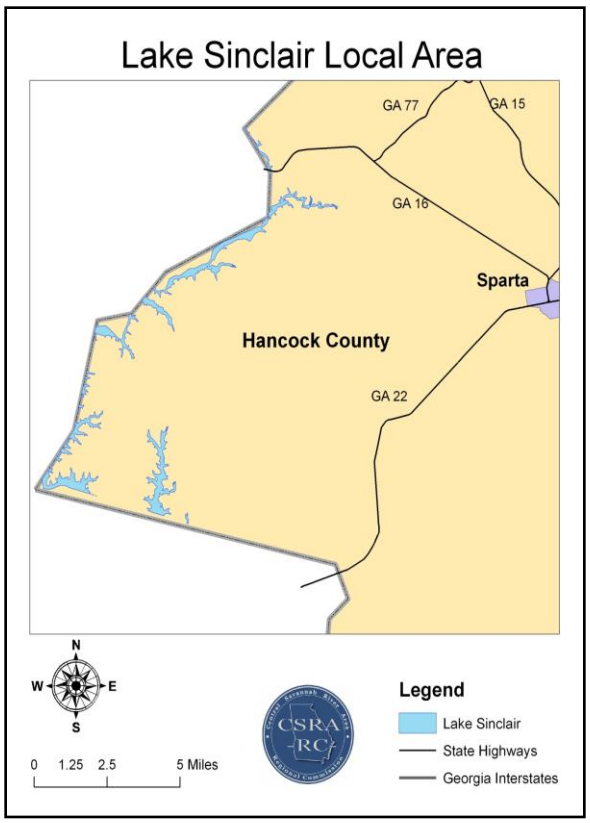
Vulnerability:

With an increasing number of visitors and residents in the Lake Sinclair region, development pressures will mount as there will be an increasing need for entertainment, hospitality, healthcare, and residential development. Despite the fact that increasing a property tax base may be enticing to local governments, the cost of developing new infrastructure in rural areas of the CSRA may be extremely costly and future development should proceed with caution.

Contamination of water due to development is a concern to Lake Sinclair stakeholders as well. There are numerous environmental concerns with developing near water sources and new development will likely alter current runoff and stormwater drainage patterns. Point source as well as non-point source pollution can result from disturbances in water-flow patterns and negatively impact the water quality in the CSRA as well as adjacent regions of the state.



Map 32: Lake Sinclair Regional Area



Map 33: Lake Sinclair Local Geography

Water Resources: Savannah River

Quick Facts:

Location: Burke, Columbia, and Richmond Counties

Source: Confluence of the Tugaloo and Seneca Rivers

Full Length: 350 Miles

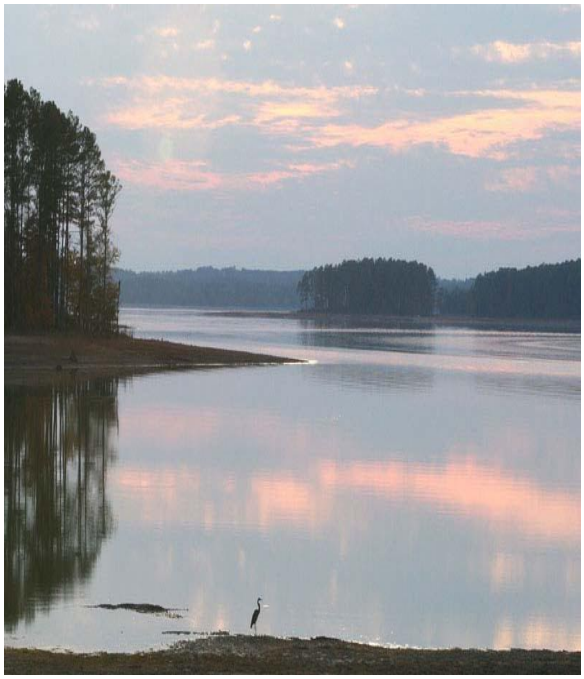
Length in CSRA: About 120 Miles

Geography and Value:

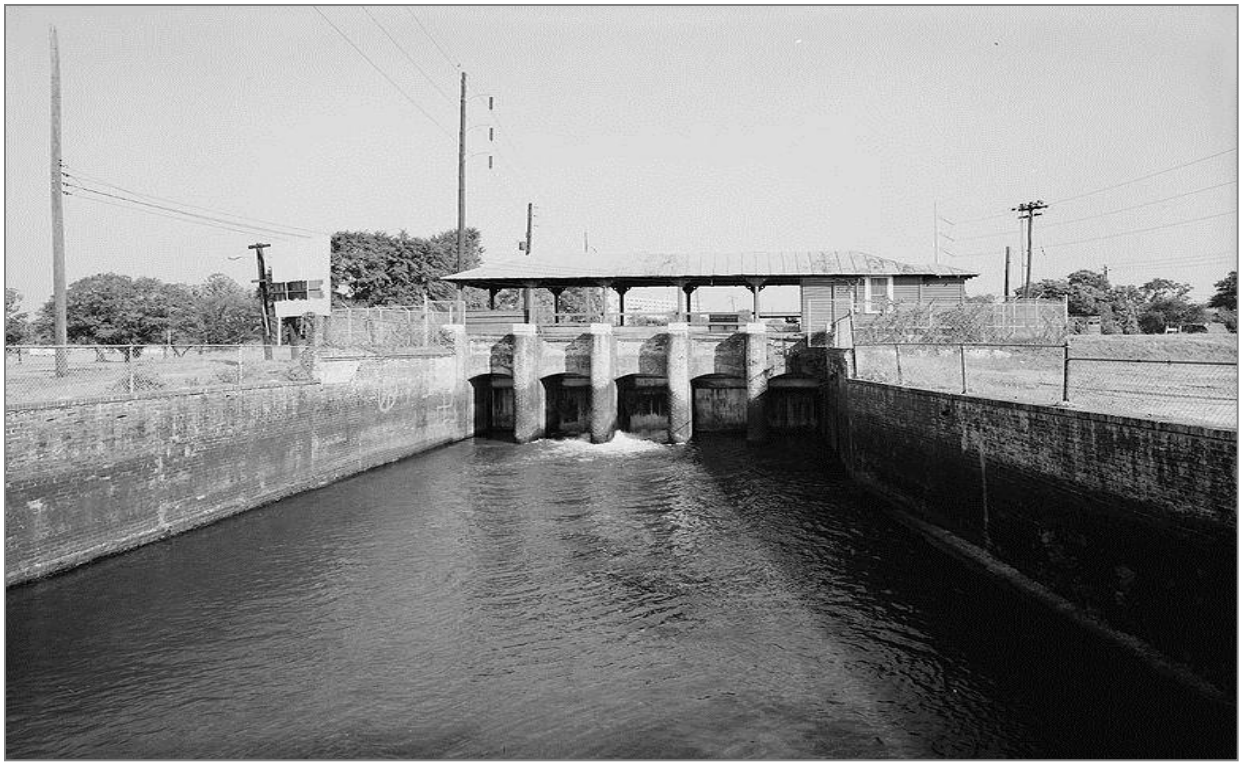
From its headwaters just below Lake Hartwell, the Savannah River flows through a vast change in ecosystems before reaching the mouth of the river that opens up into the Atlantic Ocean. The Savannah River was easily navigable at one point from Savannah up to Augusta (the two largest cities on the Savannah River), but the shipping industry along the Savannah River has virtually disappeared over the past thirty years. Due to lack of demand for freight shipping in recent years along the Savannah River, channel maintenance along the river has also ceased. According to the New Georgia Encyclopedia, the U.S. Army Corps of Engineers is considering a project to restore many of the meandered banks along the river to hopefully create a better connection between the Port of Savannah and Augusta in the near future.

Historically, cities emerged along waterways because water wasn't as easily extractable, nor was transportation as simple in past centuries as it is today. While the Savannah River may have been a 'lifeline' in Augusta's early days, the river still plays a vital role to the health and growth of the Augusta metropolitan area. The Savannah River is dammed 3 times between its headwaters in Hart County, Georgia and its opening into the Atlantic Ocean. The damming of the river provides hydroelectricity for the region as well as a number of recreational lakes, including Clarks Hill Lake. In Burke County, Plant Vogtle utilizes water from the Savannah River to create electricity from its nuclear reactors that are operated by Georgia Power Company. Also, most importantly, the Savannah River also provides drinking water for the Augusta metropolitan area.

Picture 18: A view of downtown Augusta from the Savannah River



Picture 19: The Savannah River winds through deep forest in the northern portion of the CSRA



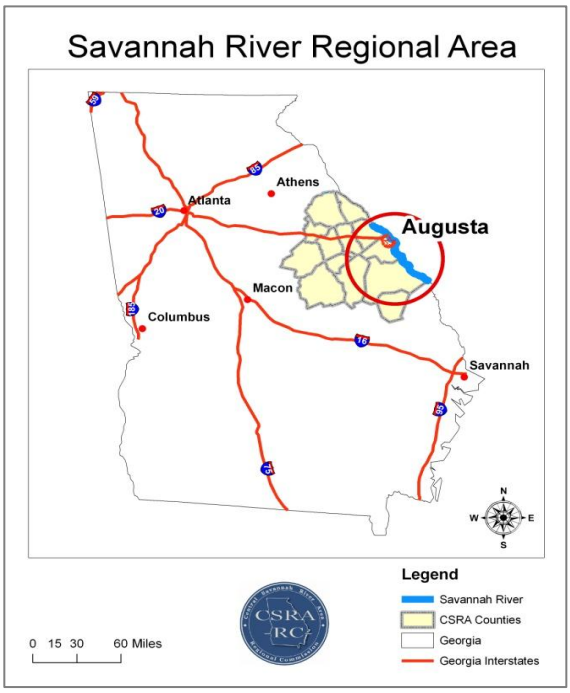
Picture 20: The Augusta Canal has been well maintained since being constructed in 1847. This date of this picture is unknown, but is said to be around the early 1940's (Source: US Library of Congress)

The strength of the Savannah River's current is fueled by the Fall Line that lies just north of Augusta. The power of the rushing water was observed by engineers and industrialists in the middle 1800's, and being able to harness the power in the form of a canal to create an industrial economy in Augusta was extremely important during this time period. After being so important in the early days of Augusta, the Canal went through a period of neglect before a rebirth in interest in the 1970's. The Augusta Canal (Picture 11 above) was listed on the National Register of Historic Places in 1975, and declared a National Historic Landmark in 1978. The Augusta Canal Authority, created by state legislature in 1989 has jurisdictional authority over the canal today.

Vulnerability:

The Savannah River and the riverbanks are home to more than 75 rare plants and animal species as well as over 110 types of different fish. Eighteen fish species are currently being watched by both the Georgia and South Carolina Heritage programs; most notably are the Robust Redhorse, and the federally endangered Shortnose Sturgeon. Allowing for these rare species to inhabit in and around the Savannah River is going to become increasingly more difficult as time passes due to declining ecological health of the river.

As many would suspect, most of the damage can be directly attributed to human interference with the environment in and around the river. To start, the large dams and reservoirs that have been constructed on the upper portions of the river have altered the natural flow patterns that some of the wildlife was dependent on. Large



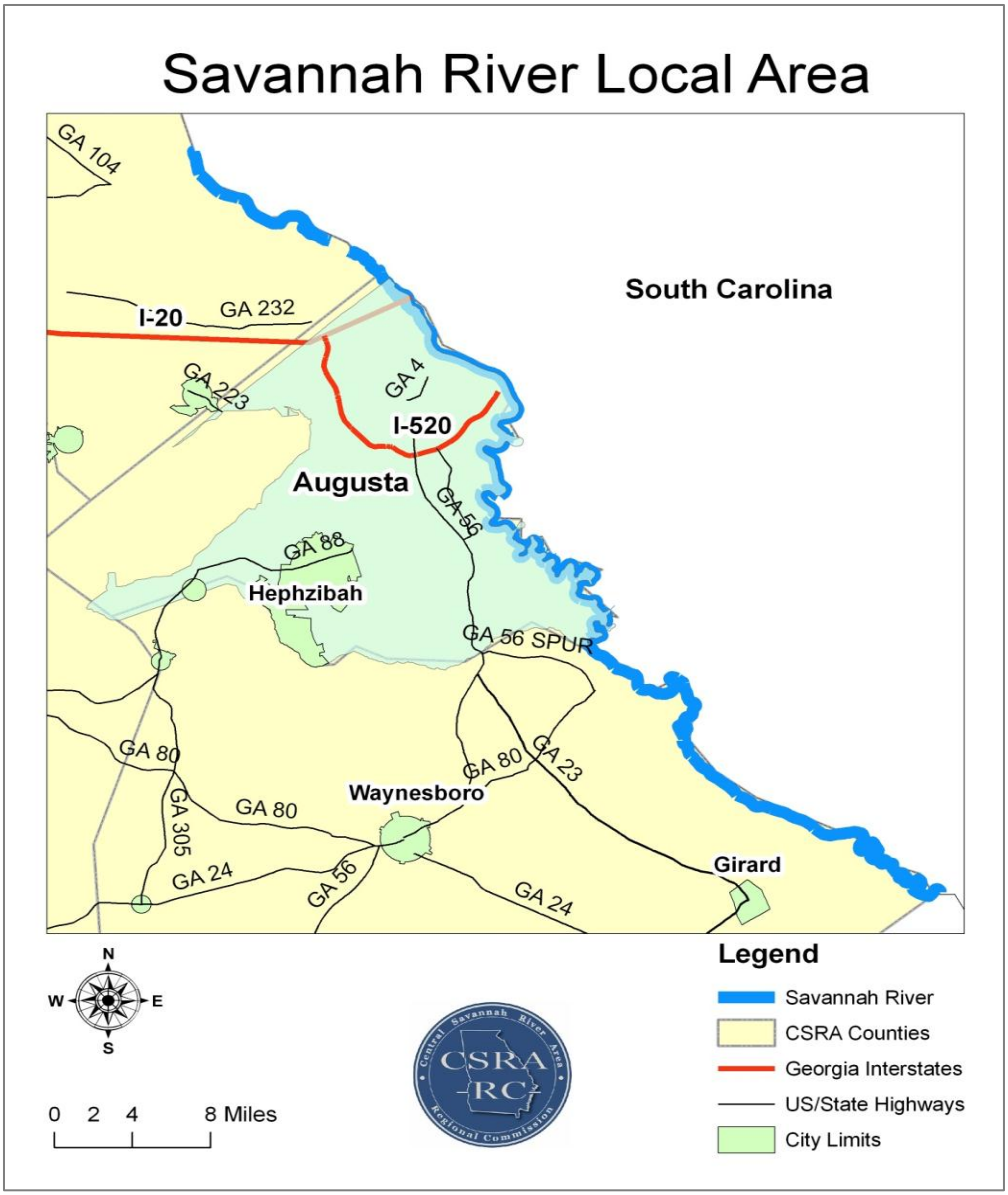
scale timbering, and harbor-dredging and expansion are also a concern to environmentalists. These types of activities can alter the balance between

Map 35: Savannah River's proximity to urban areas in Georgia

Map 34: Savannah River Local Area

freshwater and saltwater in the water, which has an impact on the ecosystem in outlying marshes.

Another major concern to local stakeholders is the increasing amount of municipal water needs in future years in comparison to the water supply of the river. A recent drought in the area created a glaring need for all communities along the Savannah River, including in the state of South Carolina, to collaborate with one another taking over taking water from the river. Population growth in the near and distant future could also alter how water is viewed in the CSRA. Industries and towns that may use the Savannah River to discharge wastewater will need to reduce water pollution to allow for greater amounts of clean water to be used by human populations. Also, it has been estimated that the Atlanta area, located about two hours west of Augusta, may reach their water capacity in the next few decades. If this occurs, there will be immense pressure on all community stakeholders around the Savannah River to supply for the Atlanta area.



Map 36: Savannah River Local Area

Water Resources: Brier Creek

Quick Facts:

Location: Burke, Jefferson, McDuffie, Richmond and Warren Counties

Full Length: About 100 Miles

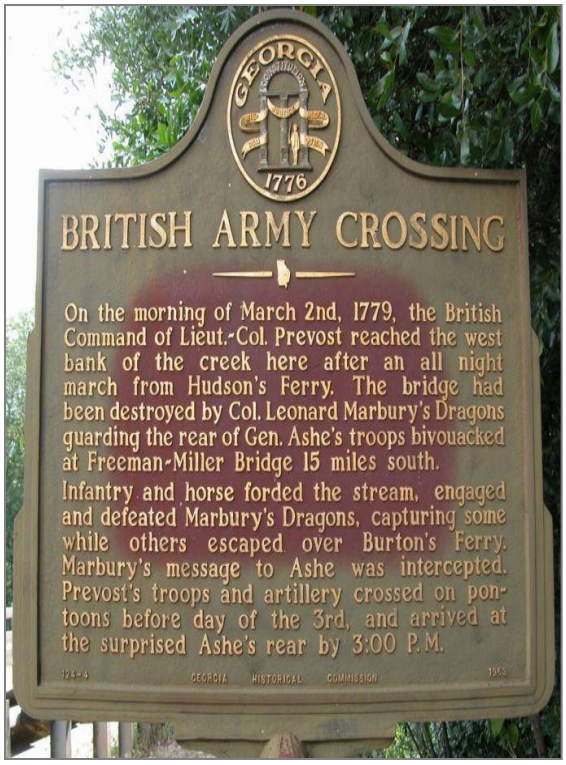
Length in CSRA: 80-85 Miles

Geography and Value:

Spanning across many of the eastern counties located within the CSRA, Brier Creek flows from the northwest, starting near Warrenton in Warren County, and flows through Burke County before eventually joining with the Savannah River in Screven County, south of the CSRA regional area. Much of the creek (sometimes referred to as a river) is about 30-50 feet in width, but that number grows as the creek approaches the Savannah River to around 80 feet. The current flowing downstream on Brier Creek is relatively swift, coming off of Georgia's Fall Line, and much of it is shaded by overhanging Bald Cypress, Sweet Gum, Sycamore and Willow Trees.

Recreation:

Fishing and canoeing/kayaking down Brier Creek are both a challenge and an exciting experience to visitors. Overhanging and fallen trees make this protected river difficult to navigate while enjoying this beautiful, and undisturbed, water passage in eastern Georgia. Fishing for Sunfish, Bowfin (also known as 'Mudfish), or even Bluegill is difficult, but one may be able



Picture 21: The Infamous 'Battle of Brier Creek' historic marker in Screven County, photo and Caption provided by the Augusta Chronicle:

"The creek was the site of one of the most famous battles of the Revolutionary War. In 1779, almost 400 patriot troops were killed or captured after being overwhelmed there by British forces."

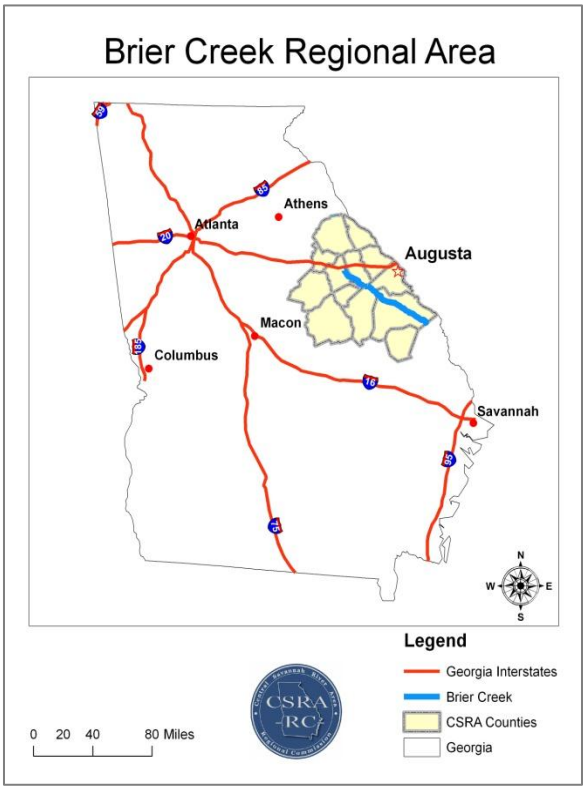
find a whole group of them in many of the deep shaded holes that exist along the banks of Brier Creek, where these fish flourish. Canoeing or kayaking down Brier Creek increasingly gets more and more difficult the closer a visitor approaches the junction of the Savannah River and Brier Creek due to marshland that may require portaging.

Vulnerability:

Today, Brier Creek may not be feeling the development pressure like Clarks Hill Lake or the Savannah River. However, if sprawling population trends continue to take place west of Augusta, especially in western Richmond County, southern McDuffie County and eastern Warren County, Brier Creek may feel some of the negative impacts that take place due to development pressures.

One variable that is affecting the health of Brier Creek is solid waste disposal, including heavy metals, that may being entering drainage systems that empty into Brier Creek. Continuance of these practices is having a negative impact on the health and quality of the water. The rural surroundings around Brier Creek also raises environmental awareness for clean agricultural practices. Currently, agricultural waste is not having a major impact on the water quality of Brier Creek, but continuing to monitor this issue and education for farm operators on new business practices will help ensure water quality going into the future.

Map 37: Brier Creek Regional Area



Map 38: Brier Creek's proximity to major urban areas in Georgia

Map 39: Brier Creek Local Area

Water Resources: Broad River

Quick Facts:

Location: Lincoln and Wilkes Counties

Full Length: 99 Miles

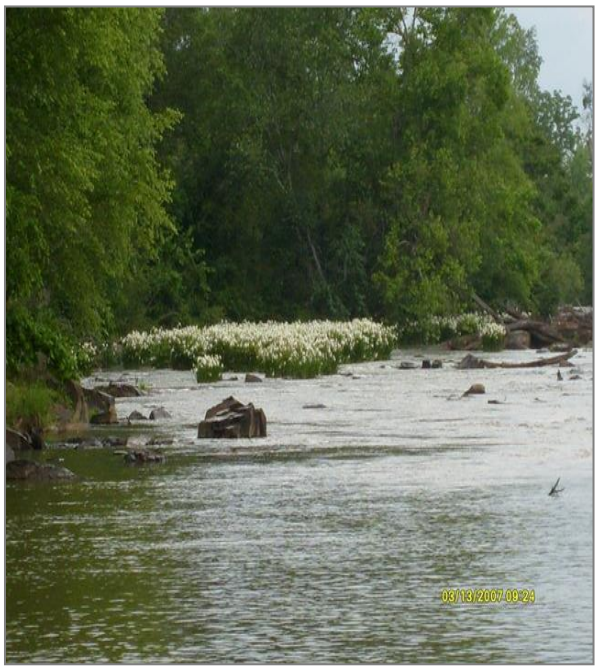
Length in CSRA: 20-25 Miles

Geography and Value:

The Broad River commences along the current county border between Madison and Elbert Counties in northeast Georgia. The convergence of the North Fork Broad River, the Hudson River, and the South Fork Broad River into one river passageway is where the Broad River receives its headwaters. The Broad River is known for being one of the last free-flowing rivers in the state of Georgia (a free-flowing river is a river that flows undisturbed, in the form of dykes or levies, from its source to its mouth). While this is a rarity in today's world, a free-flowing river is extremely important to the environment and should continue to be protected from human interference. By allowing the Broad River to run its natural course, the richness of the plant and animal species has also remained undisturbed and continues to flourish in and around the river.

In the CSRA, the Broad River lies in the northern most portion of the region, along the northern border of both Lincoln and Wilkes Counties. Flowing from southeast to northwest, the Broad River's inception is Clarks Hill Lake.

Picture 22: The Broad River winds through miles of forested area with a number of small whitewater rapids along its route before emptying into the Savannah River

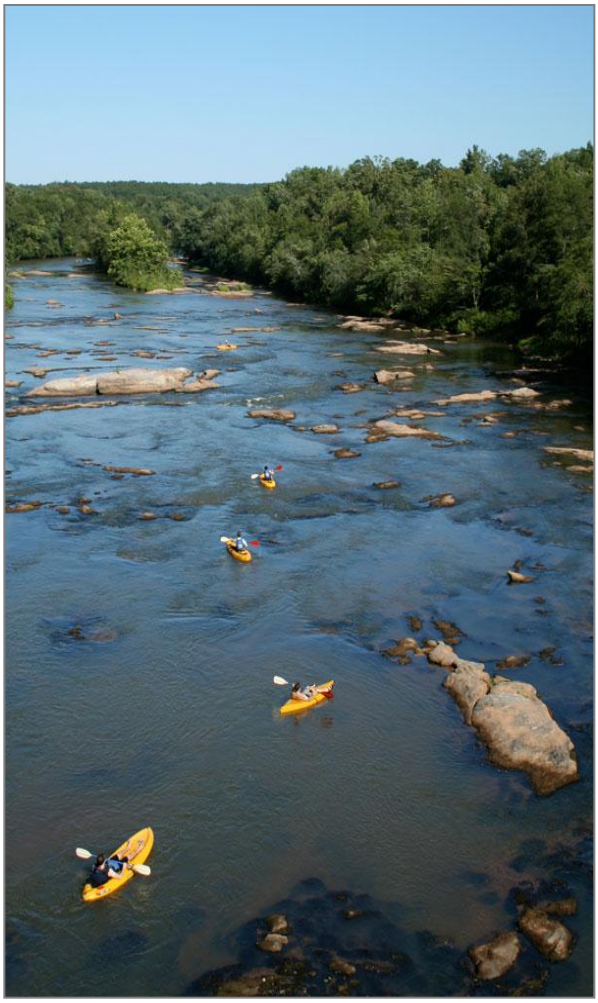


Picture 23: A photo of some beautiful Shoal Lilies that inhabit along the Broad River (Photo courtesy of the Broad River Watershed Association)

Almost all of the Broad River has been designated by the National Park Service as part of the Federal Wild and Scenic Rivers System. Furthermore, the Georgia Department of Natural Resources (DNR) wanted to emphasize its importance even further as a regional commodity, and designated the Broad River as an environmental corridor. The Georgia Department of Community Affairs (DCA) recognizes the Broad River as a Regionally Important Resource as well in 1993, and that has helped in limiting the amount of development that exists around the river.

Recreation:

As shown in Picture 24 to the right, kayaking is a popular recreational activity that many participate in to enjoy the Broad River. Some areas of the Broad River are reserved for more experienced kayakers as there are a few whitewater rapids as well as small waterfalls that can be dangerous to a beginner. Overall, there are not many recreational entry points onto the river, but fishing still takes place at various places. Along the banks of the river, hiking, hunting and wildlife observation is also abundant along the Broad River.



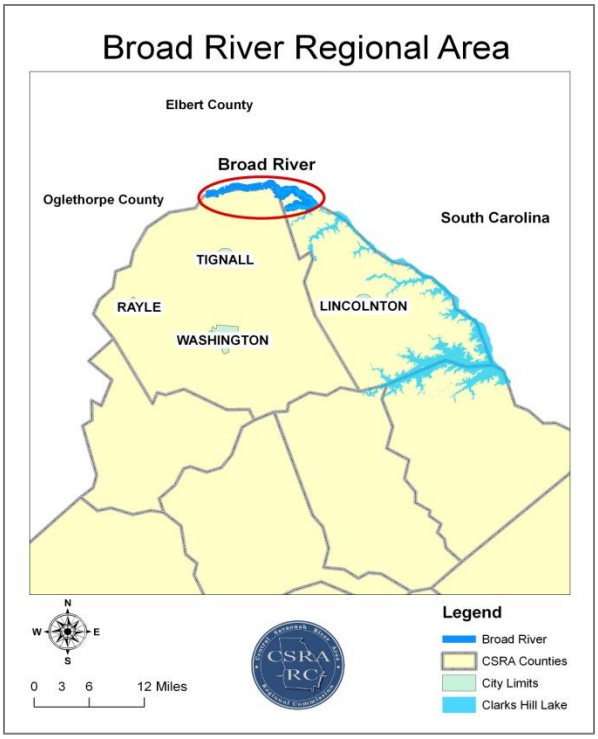
Picture 24: Kayakers paddling down the Broad River, probably returning to the Broad River Outpost near Danielsville, Georgia in Madison County

Vulnerability:

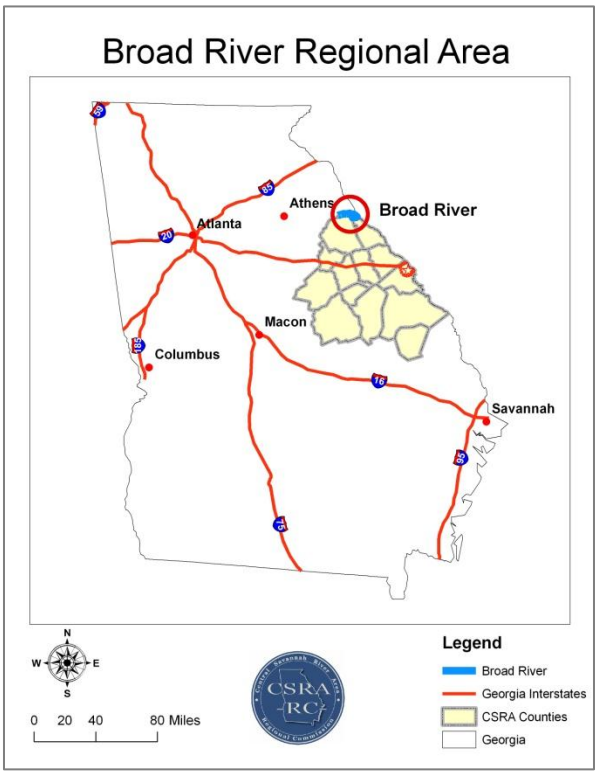
Despite being recognized by influential environmental groups, the Broad River still does face many concerns as we move into the future. Although, it is a positive step that the Northeast Georgia Regional Commission is taking the necessary steps to protect the Broad River as much as possible which will likely lessen the chance that there will be water quality issues by the time the water flows downstream approaching Wilkes and Lincoln Counties in the CSRA (and the Savannah River as well). Some of the environmental hazards that might affect the Broad River are:

- Littering
- Agricultural waste runoff
- Riverbank erosion
- Lack of tributary protection
- Older septic systems that may lie near the river
- Future floodplain development
- and; Destruction of the vegetative buffer

Again, the Broad River has been able to escape much human interference due to it being a free-flowing river as well as Federal and state protection. As the future looms, however, it is important that these concerns that Broad River stakeholders have are monitored and taken into consideration by community leaders and future developers in the CSRA region.



Map 40: Broad River Regional Area



Map 41: Broad River's proximity to major urban areas in Georgia

Water Resources: Ogeechee River

Quick Facts:

Location: Burke, Glascock, Hancock, Jefferson, Jenkins, Taliaferro, Warren and Washington Counties

Full Length: 245 Miles

Length in CSRA: 140-150 Miles

Geography and Value:

With its headwaters starting in Greene County (West/Northwest of Taliaferro County), the topography of the river changes immensely as it empties into the Atlantic Ocean. The headwaters of the Ogeechee are located in Georgia's Piedmont Province, an area characterized by rolling hills. However, as it gently flows through the CSRA area, the elevation becomes increasingly more and more flat as the river approaches the low-lying coastal areas. The point of transition between the changes in topography can be seen southeast of Louisville (Jefferson County) where the river crosses over the Georgia Fall Line.

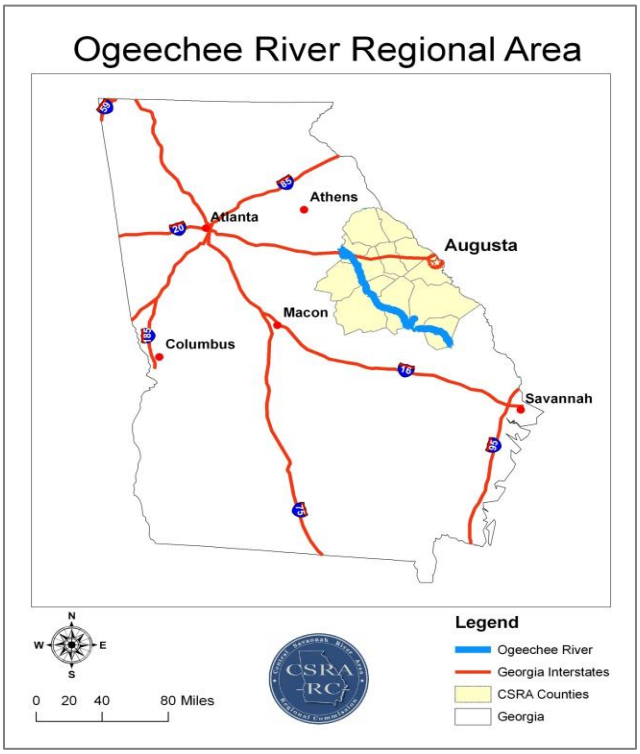
Geographically, the Ogeechee River has an impact on most of the counties that lie in the CSRA. Once passing over the Georgia Fall Line, the Ogeechee picks up volume and width as it joins up with adjacent marsh areas that run parallel to the river. The watershed for the entire river is over 5,500 square miles, larger than the state of Connecticut, and is home to a variety of temperate climate plant and animal species that use the river and outlying swamp lands as its primary habitat. Beautiful trees, such as the Wild Azalea and the Ogeechee Lime Tree flourish along the riverbanks of the Ogeechee River.

Picture 25: Overhanging trees line some of the lower-lying portions of the Ogeechee River

Picture 26: The northern portion of the Ogeechee River is much narrower than the southern portion

Vulnerability:

There are currently 57 facilities, including industries, along the entirety of the river that are permitted to discharge wastewater into the Ogeechee River Basin. This is authorized by the U.S. Environmental Protection Agency's 'National Pollutant Discharge Elimination System' (NPDES) permit program, and although NPDES is intended to discourage polluting water sources with waste, the Ogeechee River is not being protected enough. Thankfully, due to the Ogeechee River's rural location, the river has not been heavily impacted by development. Also, the river has not been negatively impacted with human interference, in the form of damming or other flood mitigation practices, and has been able to maintain in its natural state throughout history.



Map 42: The Ogeechee River's proximity to major urban areas in Georgia

Map 43 (Left): The Ogeechee River is vital to the CSRA as it passes through eight counties

Water Resources: Oconee River

Quick Facts:

Location: Washington County

Full Length: 170 Miles

Length in CSRA: 15-20 Miles

Geography and Value:

The Oconee River is considered a Protected River Corridor by the Georgia Department of Natural Resources (DNR). With its head waters starting north of Athens, Georgia in Hall County, the Oconee River flows north to south through the eastern portion of the state and is dammed to create Lake Oconee and Lake Sinclair. The Oconee River's confluence with the Ocmulgee River formulates the Altamaha River, which has recently been regarded as one of the most threatened rivers in the US due to loss of water flow.

Within the CSRA, the Oconee River lies along the western border of Washington County for approximately 15-20 miles. Washington County is proud to boast its beautiful scenic views from high above the Oconee River from numerous bluffs that overlook the river. Due to the historically rural nature of the county as well as the steep slopes that exist along the western border of Washington County (some reaching almost 25%), development has not had much of an impact along the river in Washington County.

Picture 27: The Oconee River flowing slowing during daybreak

Picture 28: Water rushing between the banks of the Oconee River

The Oconee River Greenway Authority is in charge of collaborating efforts in municipalities and counties that are adjacent to the Oconee River in terms of creating a greenway and park system that will tie numerous communities together. Residents and visitors alike will eventually be able to enjoy the archeological, rich history, and the great outdoors along the banks of the Oconee River. For more information, please contact the Oconee River Greenway Authority or visit their webpage at www.oconeegreenway.org.

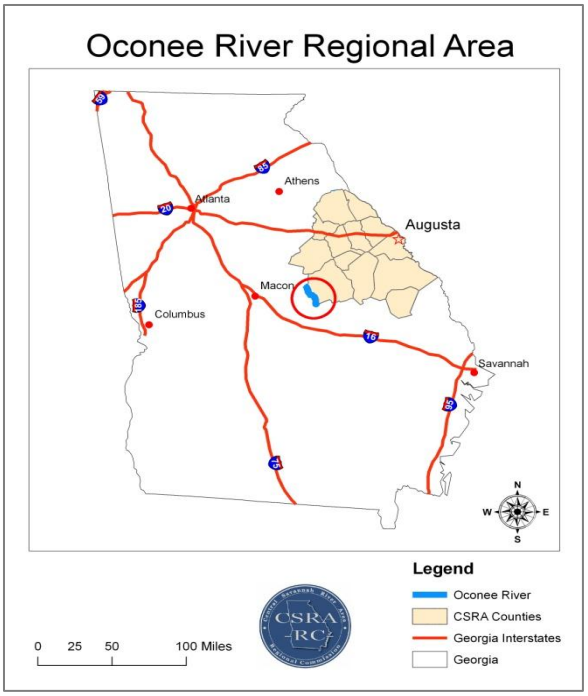
Picture 29: The Oconee River, like many other waterbodies in Georgia and in the southeast, experienced low water levels in recent years due to drought condition

Vulnerability:

Despite the Oconee River's location in a relatively undeveloped region of the CSRA, there are still a number of ways that the Oconee River can experience a decline in water quality as well as deterioration of the beautiful bluffs and riverbanks that surround this protected river corridor. As a protected river corridor, there are existing policies that that prohibit many forms of development within a certain distance of the water source. The Environmental Protection Division (EPD), which is part of the Georgia Department of Natural Resources (DNR), states that protected river corridors must have "a 100-foot vegetative buffer on both sides of rivers; consistency with the Georgia Erosion and Sedimentation Act; and local governments must identify river corridors in land-use plans developed under their respective comprehensive planning acts ".

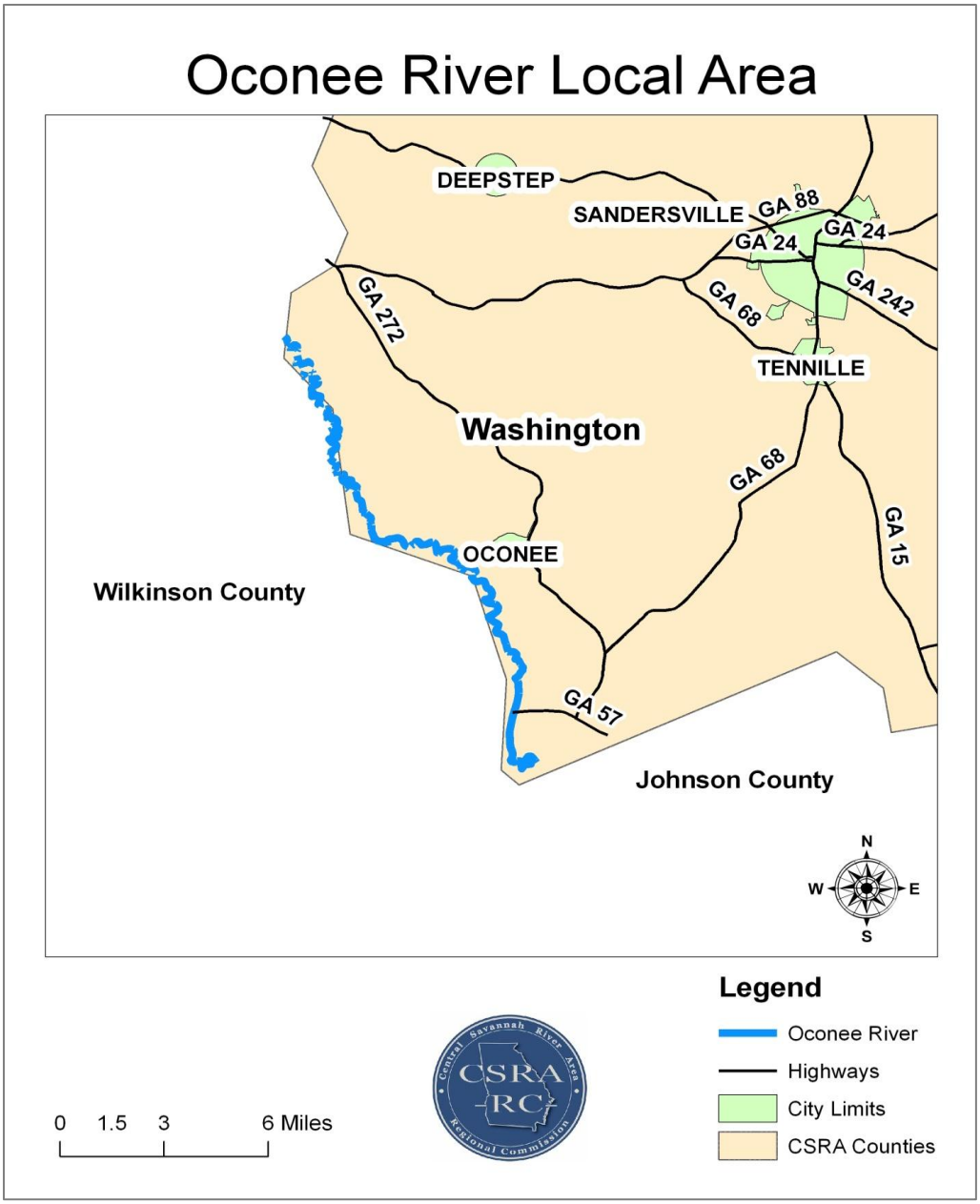
While operating a farm on property adjacent to the Oconee River may be allowed under EPD's requirements for observing a protective river corridor, non-point source pollution still takes place and is damaging the water quality of the Oconee River. One way agricultural lands may harm the Oconee River is with fecal coliform bacteria. Waste created by farm animals can find its way into water sources with water runoff during a storm. The presence of fecal coliform bacteria can increase the chance of waterborne diseases affecting humans as well as disturb fish populations in the water.

Map 44: Oconee River Regional Area



Map 45: Oconee River's proximity to major urban areas in Georgia

Similar to the way that farmland waste can enter the Oconee River, fertilizer can enter water sources as well. While the nutrients in fertilizer help plants grow on the land, it can help algae grow under water as well if it enters a water body. Algae will then grow and block sunlight from entering the river bottom, which in turn will destroy the ecosystem that relies on sunlight that inhabits the water floor. The presences of algae will also have a negative effect after it dies. During decomposition after algae dies, oxygen is being lost in the water; thus resulting in the death of numerous fish.

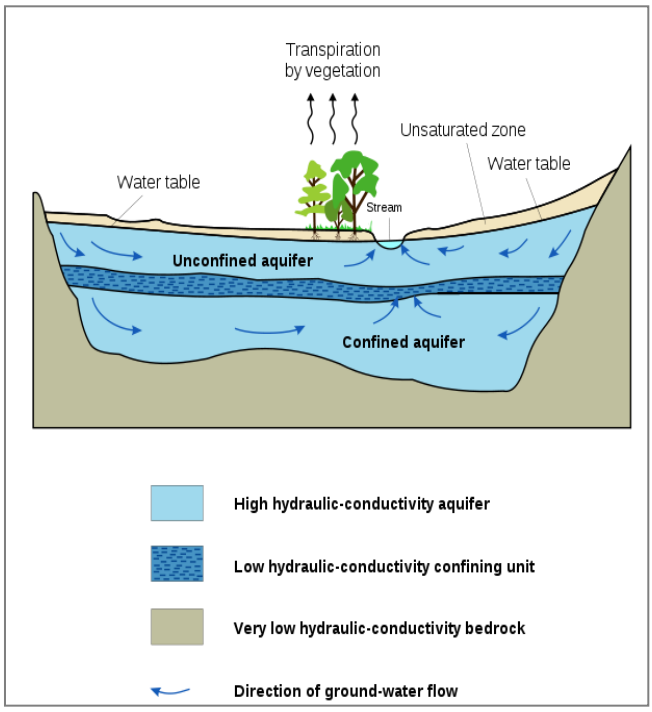


Map 46: Oconee River Local Area

Water Resources: Groundwater Recharge Areas

Overview:

Groundwater recharge areas are extremely important to the region for water supplies and storm water management practices. A groundwater recharge area is any portion of the earth's surface where water infiltrates into the ground to replenish an aquifer. Aquifers are soils or rocks that yield water that is extractable to a water well. The value of groundwater recharge areas locally is immeasurable. Due to the rural nature of much of the land area in the CSRA region, many of the households are dependent upon groundwater recharge areas because their homes are served by well water. Protecting the groundwater recharge areas in the region is extremely important to CSRA residents as the water quality in these areas are vulnerable to outside disturbances. The Georgia Department of Natural Resources monitors groundwater aquifers in the region.

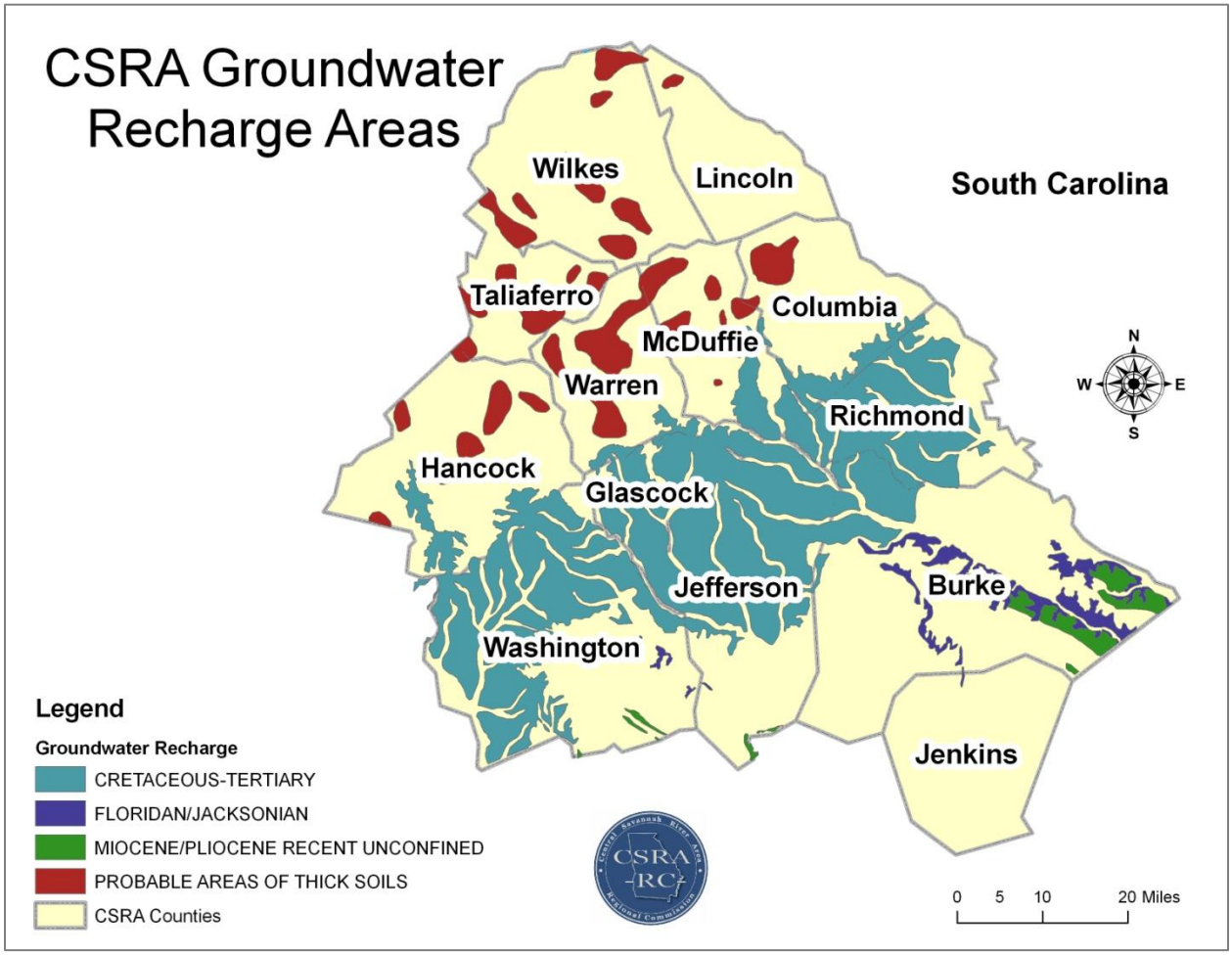


Picture 30: Groundwater Recharge Process

There are two groundwater recharge areas that exist in the CSRA: The Floridan aquifer and the Cretaceous aquifer systems. Closest to the fall line, the Cretaceous aquifer system consists of sands and gravels deposited on ancient beaches. This aquifer is mostly used in a narrow band through the middle of the state. However, the more active aquifer in the region is the Floridan aquifer system which lies south of the fall line. The extremely productive Floridan aquifer system, a series of Paleogene limestone formations, underlies most of South Georgia and extends from southeastern Alabama to South Carolina and Florida. In most places, the Floridan aquifer is artesian, confined above and below by relatively impermeable clay layers. In the lower Flint River basin of southwest Georgia, the Floridan aquifer is semi-confined. There, the aquifer recharges annually with seasonal rainfall from November to April. Where the Floridan aquifer is at or near the surface, many springs can be found. Most of the groundwater used by agriculture comes from the lower Flint River basin because the Floridan aquifer is shallow and productive.

Vulnerability:

As mentioned before, groundwater recharge areas are a source of water supply to many CSRA residents. As populations in the region continue to sprawl to areas that were previously undeveloped, human contact becomes a growing threat to the health of the water supply in these aquifers. Increasing the amount of impervious surface around a groundwater recharge area heightens the risk of non-point source pollution in the form of runoff into the aquifer. Overall, groundwater availability in the aquifers is still good at this time. However, in the more urbanized Augusta area, DNR becoming increasingly wary about the stress placed on the aquifers and has urged the city to pursue surface water as an alternative source of supply for drinking water.



Map 47: CSRA Groundwater Recharge Areas

Water Resources: Wetlands

Overview:

As defined by Federal law, freshwater wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland areas are vital to the ecosystem and serve as an integral place for fish and wildlife habitats as well as breeding grounds. Numerous species of plants and animals have adapted to the unique conditions that wetland areas are able to provide and have become reliant on these areas as their primary habitats. However, wildlife is not the only reason why wetland areas are environmentally significant. Wetlands are also important for flood mitigation, erosion control, water quality maintenance, groundwater recharge areas and recreation opportunities. Phinizy Swamp, located in Richmond County is taking advantage of its natural landscape and wildlife diversity by offering education opportunities to visitors at Phinizy Swamp Nature Park. Its goal is to educate children and adults about the important functions of wetlands and the need to protect and preserve them.

Map 48: Wetland areas in the CSRA

The Environmental Protection Agency (EPA) is responsible for restoring and maintaining the environmental integrity of the nation's wetland resources. All of the counties in the CSRA utilize the federal regulatory tool, Section 404 of the Clean Water Act, to manage and dictate what is taking place in and around wetland areas. Section 404 of the Clean Water Act establishes a permit program to regulate the discharge of dredge or fill material into waters of the United States, including most wetlands. To protect these environmentally sensitive areas, the EPA's goal is to allow no long-term degradation and no net loss of wetlands. A 404 permit may be required for any

discharge of dredge or fill material in wetlands of over 0.1 acre in size; penalties for beginning work without a permit are severe. The Clean Water Act requires that a determination of jurisdiction for any work that would result in altering over one-acre wetlands.

Vulnerability:

Wetlands are threatened by a number of human and natural actions in the CSRA. Some of these are direct human threats such as drainage of the wetlands for land reclamation, construction of dikes, dams and levees which alter wetlands, and discharge of toxic materials such as oils, pesticides or other pollutants which destroy plants and wildlife within the wetlands. Indirect human activities such as sediment diversion by dams and channels, and subsidence due to extraction of groundwater, oil and other minerals can also damage the integrity of a wetland area. Finally, some natural threats or occurrences such as storms, droughts, and destruction by animals can also be harmful.

Picture 31: Phinizy Swamp, Richmond County

Water Resources
Appropriate Development Practices

Overview:

As previously stated, these Regionally Important Water Resources are threatened by the potential of point and non-point pollution entering these water bodies and negatively impacting water quality, as well as the indiscriminate destruction of wetlands and bird, fish, and wildlife habitats by urban development activities. In an effort to reduce the vulnerability of these important water resources to these threats, the following best management practices are recommended for use by developers or landowners when designing new developments within one mile of the Regionally Important Water Resources. This listing will also be used by the CSRA Regional Commission for reviewing Developments of Regional Impact (DRI) located within one mile of these resources.

- For housing and mixed-use developments that meet the DRI threshold, survey the environmental features of the development site including topography, soils, hydrology, trees and vegetation, wildlife habitats, and historical and cultural sites and preserve the sensitive areas identified by this survey by setting them aside as parks, trails, and greenbelts.
- Establish aquatic buffers (beyond the minimum required by state law) that serve as natural boundaries between local waterways and new development and to protect on-site wetlands.
- Limit the proportion of the site that can be covered in impervious roofs and pavements.
- Limit pavement in cul-de-sacs and consider replacing it with vegetated soil that reduces runoff and provides water infiltration and treatment.
- Utilize porous pavement materials wherever possible to allow underlying soil to absorb rainfall and treat pollutants.
- Construct vegetated swales as a replacement to curbs or drainage pipes.
- Construct bio-retention areas or rain gardens in parking lot islands or within small pockets of residential areas.
- Limit clearing, grading, and disturbance to those areas that construction actually requires to preserve existing trees and soils that attenuate, treat, and infiltrate rainfall and runoff.
- Where permitted by local regulations and standards, cluster development to preserve open space and natural features on the development site, limit street width and curbing only to that needed for each street's specific function, and limit the amount of parking to the absolute minimum necessary for the particular land use.

- For new agricultural operations, consult representatives from the Natural Resources Conservation Service (NRCS), Georgia Soil and Water Conservation Commission, and the County Extension Service, where necessary and initiate appropriate best management practices.
- For new forestry operations, consult representatives from the Georgia Forestry Commission and initiate appropriate best management practices.

Water Resources
General Policies and Protection Measures

Overview:

What follows is a list of general policies and protection measures that are intended primarily as guidance for local governments in planning and decision-making that affects the Regionally Important Water Resources identified in this plan. In addition, the CSRA Regional Commission will use these policies and protection measures when reviewing local comprehensive plans for consistency with regional plans, and to encourage local governments in the region to adopt the policies and enhancement activities most appropriate for the protection of the resources located within their communities.

- The protection and conservation of the Regionally Important Water Resources will play an important role in making decisions about future growth and development in the community.
- More compact urban development will be encouraged in order to protect environmentally sensitive resources from encroachment.
- Environmentally sensitive areas on development sites will be preserved by setting them aside as public parks, trails, or greenbelts.
- The protection and maintenance of trees in all new developments will be promoted.
- Low impact development that preserves the natural topography and existing vegetation of development sites will be promoted.
- Infrastructure networks will be developed to steer new development away from areas containing sensitive natural resources.
- The institution of green infrastructure and other techniques to protect water quality will be promoted in all new developments and redevelopments.
- Educating the public on the benefits and practices of environmental stewardship through the use of various education and communication tools will be promoted.
- The application of environmental protection strategies, such as transfer development rights, conservation easements, fee simple acquisition, conservation tax credits, etc. will be utilized wherever possible.
- Within agricultural areas, the local government will work in coordination with the NRCS, Georgia Soil and Water Conservation Commission, the County Cooperative Extension Office and the landowner to encourage the installation of the recommended agriculture best management practices.

- Within forested areas, the local government will work in coordination with the Georgia Forestry Commission and the landowner to secure the installation of appropriate forestry best management practices.
- The community will work in coordination with state and federal agencies and other stakeholders to implement the TMDL Implementation Plans for those streams listed on the EPA 303(d) list.
- Amend existing or create new land development ordinances that will:

    1. Encourage the development of cluster subdivisions that feature walking/bicycle trails, passive parks, and greenbelts;
    2. Establish larger buffers than which is required under state law between local waterways and new development;
    3. Limit the amount of parking to the absolute minimum necessary for the particular land use;
    4. Limit the street width and curbing only to that absolutely necessary for each street's specific function;
    5. Limit clearing, grading, and disturbance to those areas that construction actually requires;
    6. Require developers of housing and mixed-use developments that meet the DRI threshold to survey the environmental features of the development site including topography, soils, hydrology, trees and vegetation, wildlife habitats and historical and cultural sites and preserve the sensitive areas identified by this survey by setting them aside as parks, trails, and greenbelts; and
    7. Establish incentives for developers to think "green" in their design of their residential, commercial, and mixed-use developments.

- Amend existing storm water management ordinances that will require:

    1. Limit the proportion of the site that can be covered in impervious roofs and pavements;
    2. Limit pavement in cul-de-sacs and consider replacing it with vegetated soil that reduces runoff and provides natural infiltration and treatment;
    3. Allow the construction of vegetated swales as a replacement to curbs and drainage pipes;
    4. Allow the use of porous pavement materials wherever possible to allow underlying soil to absorb rainfall and treat pollutants; and
    5. Allow the construction of bio-retention areas or rain gardens in parking lot islands or within small pockets of residential areas.

- Develop a "greenspace" plan that will identify and prioritize key lands for acquisition within one mile of the Regionally Important Resources (Water and Parks and Forestry).

- Participate in the Georgia Land Conservation Program, Conservation Tax Credit Program, Land and Water Conservation Fund Program for acquisition (fee simple or easements) of priority conservation areas identified by the "greenspace" plan.
- Explore and expand partnerships with land trusts, other conservation organizations, and neighboring local governments as a means of permanently protecting the priority areas identified by the "greenspace" plan.
- Explore the adoption of a Transfer Development Rights ordinance that will allow for the transfer of development away from the priority areas recommended in the "greenspace" plan to those sections of the community where the future development plan calls for more intensive use and the necessary infrastructure (water, sewer, and roads) to be in place to accommodate this growth.
- Adopt an ordinance that protects and replenishes the significant tree canopies within one-mile of the Regionally Important Water Resources.
- Establish a community environmental awareness and stewardship education program, involving citizens, builders and developers that has as one of its objectives, establishing an understanding of the importance to protect the Regionally Important Water Resource(s) in the community and how the general public can participate in efforts to protect such resources.
- Conduct an evaluation of the existing local on-site sewerage management program, with particular attention to the area within a mile of the Regionally Important Water Resource, and amend the on-site sewage management regulations and requirements, as necessary to reduce the potential risk of contamination to the Regionally Important Water Resources from these sources.
- Prepare, adopt, and implement Source Water Protection Plans for the water supply intakes located on or near the Regionally Important Water Resources where such plans have not yet been established. Apply for the Georgia Department of Community Affairs' Water First Program that emphasizes water protection and conservation.
- Sponsor and/or participate in annual clean-up events along the Regionally Important Water Resources and their tributaries.
- Prepare, adopt, and implement National Pollutant Discharge Elimination System (NPDES) permit-driven watershed assessments and protection plans, PL-566 watershed plans, Section 319(h) grant watershed assessments, local erosion, sedimentation, and pollution controls that provide watershed planning and management strategies to address any portion of the Regionally Important Water Resource watershed.
- Implement activities that address the requirements for the NPDES Phase I or II MS4 program.
- Prepare, adopt, and implement local water resources ordinances that address the
  DNR Environmental Planning Criteria (water supply watersheds, river corridors, significant groundwater recharge areas, and wetlands.)

Historic and Cultural Resources

Overview:

In its most basic terms, historic preservation means having the good sense to hang on to something that is viewed as containing value, for example an older building or neighborhood or a piece of landscape. They have value because they are important to us as individuals, as a community, and as a region. Collectively, we have decided to call these things of value "historical or cultural resources", and can include anything that is significant in our history, architecture, archaeology, or culture. Not merely artifacts on the landscape, these cultural resources are tangible expressions of people who lived in their own times, cultures, and environments.

These vestiges of our collective heritage contribute to our sense of place and cultural identity. They may reflect our value systems, be they spiritual, aesthetic, educational, scientific or recreational. They may also be fragile, irreplaceable, and non-renewable.

Inclusion in the Regionally Important Resource Plan is a way we can both recognize and manage these historic and cultural resources for the benefit of present and future generations. A list of such resources in the CSRA includes historical districts, courthouses, churches, cemeteries, living traditions, structures and buildings that are significant in regional, state or national history, architecture, archeology, or culture, and encompass all cultures, economic classes, and social, political and private activities from the past to the present. All individual nominations submitted to the CSRA Regional Commission were reviewed and addressed separately, however many of the historic resources within the CSRA fall within a Historic District and therefore we have determined that policies that address these resources under a thematic umbrella are sufficient to protect these sites and will also ensure that the depth and breadth of our Cultural and Historical Resources are given due consideration.

Historic Preservation may be understood as both an ethical approach and a physical act. As an ethical approach, historic preservation expresses the underlying values that allow us first to recognize and then define how to best manage the resources using the best methods available. The preservation of historical or cultural resources has many diverse purposes and rewards, including the strengthening of local economies,

stabilization of property values, the fostering of civic beauty and community pride, and the appreciation of local and national history. The preservation of cultural resources is a public purpose that advances the education and welfare of citizens, while providing economic and aesthetic benefits as well.

The CSRA is rich in history, living traditions, and regional character, all of which define our cultural heritage and community identity. Cultural and historical resources are those places that are created by and reflect upon the people who have lived for hundreds of years in what is today the CSRA, regionally important Historical Resources define a sense of place and tell our story to the State and Nation.

Historic Districts

Value:

National Historic districts are geographic areas that have a concentration of thematically related historic resources. The U.S. federal government designates historic districts through the U.S Department of the Interior, under the auspices of the National Park Service Federally designated historic districts are listed on the National Register of Historic Places. The primary purpose is identification. State Historic Districts can either follow similar criteria or have no restrictions on property owners or they can require strict adherence to historic rehabilitation standards. The Central Savannah River Area has 36 historic districts; all of the CSRA's historic districts are listed in the National Register.

Picture 32: Phinzy House located in the Historic Augusta District

A local historic district, not be confused with the National, is a district designated by a local ordinance, which falls under the jurisdiction of an appointed citizen board called a historic preservation commission. It provides communities with the means to make sure that growth, development, and change take place in ways that respect the important architectural, historical, and environmental characteristics within a district. A local historic district is an area that has significance because it has special character or historic, cultural or aesthetic value or interest, or it represents one or more periods, styles or types of historic architecture, and it stands apart visually as a unique section of the city.

Properties in both Local and National historic districts are classified as either "contributing" or "non-contributing" resources, according to standards established by the National Park Service. Contributing resources date from the historic period of significance established for the district (which must be at least 50 years or older. They contribute to the significance and character of the district through their historical associations and/or architectural values. Non-contributing resources are those that, due to date of construction, alterations, or other factors, do not contribute to the district's historic significance or character. The zoning regulations that apply in a historic district generally differ for contributing and noncontributing properties are in general stricter than within the National Historic Districts. Cities all across Georgia have adopted local historic preservation ordinances to keep the look and feel of the place they call home.

National and statewide economic studies show that historic district designation stabilizes property values, and allows values to rise at rates greater than average local market rates as a whole, compared to similar neighborhoods that are not designated.

Vulnerability:

The original concept of an local historic district was as a protective area surrounding more important, individual historic properties. As the field of historic preservation progressed, those involved came to realize that the structures acting as "buffer zones" were actually key elements of the historic integrity of larger, landmark properties. Preservationists came to understand that districts should be more encompassing, blending together a mesh of structures, streets, open space and landscaping to define the historical character of a historic district.

Before 1966, historic preservation in the United States was in its infancy. At that time the idea of designating and regulating areas recognized for their aesthetic, historic and cultural significance was new and untried. How the effort to preserve and protect historic buildings would be received by property owners, residents, realtors, developers and the courts was unknown. The National Historic Preservation Act of 1966, which established the National Register of Historic Places along with other federal historic preservation programs, helped to instill a sense of orientation. It was recommended that historic preservation programs focus not solely on individual properties but also on "areas and districts which contain special meaning for the community."

Until the U.S. Supreme Court's Penn Central decision in 1978, a degree of uncertainty hung over the local government's actions. Therefore the early criteria for district designation were rigid and based on narrow perceptions of what constitutes historic value. Thus the boundaries of many early historic districts are "exclusive" rather than "inclusive". As a result, much was omitted from these historic districts that, in retrospect, should have been included. However, during the last 45 years both the benefits of designating and the negative consequences of not designating have become obvious. The fears and uncertainties voiced earlier have proven unfounded, and the need for expanded boundaries is now apparent.

Historic districts in the Central Savannah River Area often face opposition because of concerns by property owners within the districts. Residents might oppose inclusion within a district because they believe they will lose their right to use or alter their property as they want. In some cases the local historic preservation commission is reluctant to enforce design standards for fear of pushback by residents.

Even as landmarking has become an acceptable and often sought after part of government's regulation of the built environment, local governments continue to designate districts with limited boundaries. Failure to embrace the traditional neighborhood lines more inclusively has caused problems on the edges of the districts,

where new construction or incongruous additions often conflict with the original patterns of development, marring even the protected district itself.

Adopting a local preservation ordinance is one of the best ways a community can begin to protect the historic character of its buildings, neighborhoods and landmarks from inappropriate alterations, incompatible new construction, even demolition. Establishing and maintaining a historic district helps creates jobs, enhances property values, revitalizes communities, and helps attract tourists.

Historic Districts by County
Burke
Waynesboro Historic District (citywide) listed 2009
Hancock
Camilla-Zack Community Center District, listed 1974, State Level of Significance
Jewell Historic District, listed 1979, State Level of Significance
Pearson--Boyer Plantation, listed 1993, Local Level of Significance
Sparta Historic District, listed 1974, National Level of Significance
Jefferson
Louisville Commercial Historic District, listed1994, State Level of Significance
Jenkins
Downtown Millen Historic District, listed 1996, Local Level of Significance
Lincoln
Double Branches Historic District, listed 1993, Local Level of Significance
Lincolnton Historic District, listed 1993, Local Level of Significance
McDuffie
Boneville Historic District, listed 2000, Local Level of Significance
Thomas Carr District, listed 1975, National Level of Significance
Thomson Commercial Historic District, listed 1989, Local Level of Significance
Wrightsboro Historic District, listed 1998, National Level of Significance
Richmond
Academy of Richmond County--1926 Campus, listed 2004, Local Level of Significance
Augusta Canal Industrial District, listed 1971, National Level of Significance
Augusta Downtown Historic District, listed 2004, Local Level of Significance
Bethlehem Historic District, listed 1996, Local Level of Significance
Bethlehem Historic District, listed 1997 (second district), Local Level of Significance
Harrisburg--West End Historic District, listed 1990, Local Level of Significance
Laney-Walker North Historic District, listed 1985, State Level of Significance
Sands Hill Historic District, listed 1997, State Level of Significance
Seclusaval and Windsor Spring, listed 1988, State Level of Significance
Summerville Historic District, listed 1980, Local Level of Significance
Taliaferro
Crawfordville Historic District, listed 2006 , Level of Significance
Warren
Jewell Historic District, listed 1979, State Level of Significance
Warrenton Downtown Historic District, listed 2002, Local Level of Significance
Washington
Church-Smith-Harris Street Historic District, listed 1987
North Harris Street Historic District, listed 1989, Local Level of Significance
Sandersville Commercial and Industrial District, Listed 2002Local Level of Significance
Warthen Historic District, listed 1997, Local Level of Significance
Wilkes
North Washington District, listed 1973, State Level of Significance
Washington Historic District, added 2004, Level of Significance not given

Table 2: Source National Register of Historic Places Items

Kettle Creek Battlefield

Value:

One of the most significant battles of the Revolutionary War was fought here by the patriots at Kettle Creek in Wilkes County, a county that was formed along with the first Constitution of Georgia in 1777. As late as the early 1770s, Georgia's boundaries were mostly within the coastal region. In only a confined area beyond Augusta were the Piedmont's heavier soils and hardwood forests included in the colony's boundary. Frontiersmen were trickling down into this region from their homes in Virginia, Maryland and the Carolinas. Mostly of English or Scotch-Irish ancestry, these settlers were seeking new economic opportunities, good land and, most importantly, as much freedom as possible from British rule.

Picture 33: Historic Marker at Kettle Creek Battlefield

Just eight miles west of Washington is the ground where the Battle of Kettle Creek was fought and won. The 12.5-acre tract of land that is the Kettle Creek Battlefield has a monument, a historical marker and several marked graves.

Currently underway is the proposed "13th Colony Trail" to promote Georgia's Revolutionary War resources. Developed in conjunction with the Georgia Department of Economic Development, this would trail would cross Washington, Augusta, Sylvania, Savannah and Burnswick, Georgia. The economic benefit of heritage tourism has been thoroughly documented.

Vulnerability:

As with many historical sites, the battlefield is threatened by development pressures. Specifically the expansion of timber cutting industries presents a significant threat to the Battlefield. A recent archaeological survey funded by Preserve America identified a core area of just over 100 acres. The Board of County Commissioners of Wilkes County only owns 20 acres of this property with the remainder owned by various private property owners who have in the past conducted activities that have had consequently led to the elimination of historical resources.

Historic Courthouses

Value:

Often the courthouse is the major traditional landmark, located at the highest point in town, with the city surrounding it. The Central Savannah River area is blessed with many beautiful historic courthouses still in use. In 1980, the Georgia courthouse thematic nomination listed all existing courthouses built prior to 1930 in the National Register of Historic Places. Fifteen years later, in 1995, the nomination was amended to include the courthouses constructed between 1930 and 1945. Today, 132 of Georgia's County courthouses are listed in the National Register.

In 2005 the Historic Preservation Department produced a publication entitled, Preserving Georgia's Historic Courthouses, it recognized the importance of Georgia's Courthouses within the state and provides technical assistance to communities with historic courthouses. In recent years the Georgia Heritage Grant Program has funded several courthouse renovation projects and much has been done to help protect, preserve, and promote their continued utilization.

Luckily for the citizens of the CSRA the majority of these instantly recognizable symbols of government are still in use, being preserved, restored or expanded and essential in their function.

Vulnerability:

While the majority of the Historic Courthouses with the CSRA are still in active use this does not make them invulnerable to development pressures.

Some counties confronted with growth and the need for additional space to carry out mandated functions have demolished or abandoned their courthouses or insensitively expanded to the point that the historical character is no longer retained.

Courthouses in smaller communities lacking the population and tax base necessary for maintenance are subject to demolition by neglect as the courthouse suffers from deferred maintenance, a major physical threat to these historic landmarks.

Picture 34: Jenkins County Courthouse

Augusta Canal

Value:

The Augusta Canal is Georgia first National Heritage Area and the nation's only industrial power canal still in use for its original purpose. Built in 1845 as a source of power, water and transportation, the Augusta Canal was one of the few successful industrial canals in the American South.

In 1847 the first factories - a saw and grist mill and the Augusta Factory-were built, the first of many that would eventually line the Canal. By the time of the American Civil War, Augusta had become one of the South's few manufacturing centers. The power afforded by the Canal led Confederate Col. George W. Rains to select Augusta as the location for the Confederate States Powderworks. The only buildings ever constructed by the government of Confederate States of America, the 28 Powder Works structures reached along the Canal for two miles. Other war industries established themselves on or near the Canal, making Augusta a critical supplier of ammunition and war materiel.

In 1875 the Canal's Chief Engineer William Phillips suggested enlarging the Canal improvements suggested to mitigate recurring flooding. Boom years followed as massive factories including the Enterprise, King and Sibley textile mills, the Lombard Ironworks and many others opened or expanded. Farm families migrated to the city for factory jobs as "operatives."

In the 1890s the city replaced its old water pumping station with the impressive structure at mid-canal that is still in use today. As the electric age began to dawn, the city turned to the Canal's falling water power to drive the first electrical generation equipment. By 1892 the city boasted both electric streetcars and street lighting - the first Southern city to have these amenities.

Gradually the factories converted from hydro-mechanical power to electrical power. The city devised a number of schemes to build a hydro-electric plant on the Canal. None were carried through to completion.

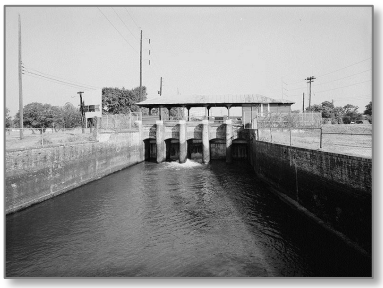
Periodic floods, which plagued the Canal and Augusta for decades, continued to cause damage during the early 20th Century. Following major floods in late 1920s and early 30s, the Federal Works Progress Administration deployed hundreds of workers to make repairs and improvements, including raising the banks, building a new spillway and straightening the Canal.

By the mid-twentieth century, the Canal entered a period of neglect. Textile factories began to close and the center of Augusta's industrial activity shifted south of the city. Although still the city's drinking water source, the canal was no longer the driving

force for development it had been one hundred years before. At one point in the 1960s, city officials considered draining the Canal and using the dry bed as the course for a superhighway.

Interest in reviving the Canal for recreational use began to appear by the mid-1970s. A state park was proposed and efforts made to have the canal and its 19th Century mills declared a National Historic Landmark. While the state park never materialized, growing public interest in the Canal's historic and scenic potential led to several important developments. The Canal and mills were listed on the National Register of Historic Places and later declared National Historic Landmarks. In 1989 the Georgia State Legislature created the Augusta Canal Authority, the body that has jurisdiction over the Canal today. In 1993, the Authority issued a comprehensive Master Plan, outlining the Canal's development potential. In 1996, the US Congress designated the Augusta Canal one of 18 National Heritage Areas.

In the 21st Century the Augusta Canal is once again a source of pride and potential for its community. The mighty Enterprise Mill, revived after years of neglect as an office and residential complex, now houses the Augusta Canal National Heritage Interpretive Center. Its exhibits and artifacts depict canal construction and mill life and remind Augustans and visitors alike of the progress, problems and promise of the Augusta Canal.



Picture 35: Pictures of the Augusta Canal from the mid–20th century to today

Vulnerability

As the state's only currently designated Regionally Important Resource, the Augusta Canal has significant protections already in place however that does not translate to this resource being without threats. There are encroaching development pressures all along the waterfront. While the Augusta Canal Authority oversees the maintenance of the facility, Richmond County holds a 99 year lease over the Canal headgates which upon conclusion needs to be renewed with strict covenants.

The Mitchell Depot

Value:

Hundreds of railroad companies have operated in Georgia since the first train rolled away in the 1830s. The Augusta, Gibson & Sandersville RR was completed in 1886. It encompassed an 80 mile narrow gauge line from Augusta south through Keysville, Wrens, Gibson and Mitchell to Sandersville, Georgia. Businesses sprang up around the depot and by 1896 the town of Mitchell was incorporated. This railroad never actually made much money and sadly closed in the 1930s.

After several attempts at reuse, in 1998 the Mitchell Town Council with Department of Transportation Enhancement funding rehabilitated the site and now the Mitchell depot stands in a pleasant park in this small Glascock County community, where it serves as a historical museum.

Before the railroad was built through what is now the town of Mitchell there was a town one half mile east named Scruggsville which encompassed several businesses including a broom factory, Methodist Church and post office which are now located at the north end of the Mitchell museum park.

Picture 36: The Mitchell Depot Museum

Vulnerability:

The current building is in need of repair. The walls are not properly sealed; therefore the building is exposed to the fluctuations in temperature between extreme hot and cold. The extreme heat takes its toll, especially on paper items. Unfortunately recent budget cuts have left the town with little resources for renovations.

The Lucy Craft Laney Museum

Value:

The Lucy Craft Laney Museum is the former home of Lucy Craft Laney. Known for her unwavering commitment to Georgia students, Lucy Craft Laney is considered a pioneer in the field of education. A member of the first graduating class of Atlanta University, Lucy Laney's remarkable academic and professional accomplishments left her mark on thousands of African-American students in Georgia.

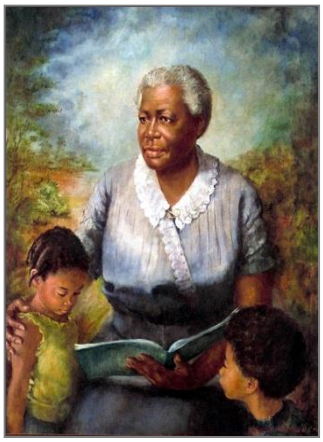
More than 100 years ago Lucy Laney opened the Haines Normal and Industrial Institution in Augusta, Georgia. Within those walls, a woman born to a slave who lived through the Civil War, Reconstruction, and the Great Depression offered black students a liberal arts curriculum and is credited with producing the first African-American kindergarten class in Georgia. In addition, the nursing department at the Haines Institute was one of the few facilities in the state which offered professional training for African-American women and evolved into what eventually became Augusta University Hospital's Department of Nursing. Today, Lucy Craft Laney High School stands on the spot where the Haines Norman and Industrial Institution once stood.

Ms. Laney died in 1933 after which her niece M. Louise Laney live in her home until she died in 1986 from smoke inhalation due to a fire in the home. After the fire Delta House Inc. purchased the home and made it into a museum to commemorate Ms. Laney's many contributions.

The Lucy Craft Laney Museum is the only African-American Museum in the Central Savannah River Area. The museum, which opened in 1991, is a small house museum that was the former home of Miss Lucy Craft Laney. The museum is located in the Historic Laney-Walker District.

Vulnerability:

The Craftsman style home was built during the early 19th century has two floors and a basement. The basement was used as a storage area. Very few building in this area have a basement due to the high water level. The basement has been converted to a children's center with computers, books and an aquarium. While the contractors have done an excellent job of sealing the floors and a water pump was installed, the occasional heavy rain will sometimes result in leaks which in turn lead to an expensive process to remediate the site.



Picture 37: Painting of Lucy Craft Laney

AH Stephens Historic Site

Value:

The A. H Stephens Historic site is also referred to as the Confederate Museum. The A.H Stephens Historic Site is a memorial to Alexander Stephens, the former Confederate vice president, US congressman and Georgia governor. Liberty Hall located in Crawfordville, Georgia was the home of A.H Stephens, and it is currently a National Historic Landmark maintained by the Georgia Department of Natural Resources. Stephens bought the estate in 1845, and lived in its house until 1875, when he tore down the main structure to build Liberty Hall. The two-story "big house" is a traditional 4 x 4 (four rooms on each level).

Many of Stephens' books are housed in a smaller structure behind, where he spent much of his time after the war. After Stephens's death in 1883, Liberty Hall, owned by his surviving relatives, served as a boardinghouse until 1932, when it was donated to the state of Georgia. The vice president's grave is on the front lawn, beneath a marble statue in his honor.

Picture 38: Liberty Hall

Liberty Hall is now a historic house museum that is part of A. H. Stephens Historic Park, and has been renovated to appear as it was in 1875. The structure is also known as "Bachelor's Hall", as Stephens never married.

This Historic site also contains the Locust Grove Cemetery, the oldest Catholic cemetery in Georgia. After Catholic families from Maryland established a congregation in Georgia in the late 18th century, they created a community, later known as Locust Grove, near what is now the site of the cemetery. A log church was built in 1809 but is now extant, only the layout of the church or is successor is marked within the cemetery boundary. The cemetery was laid out after a donation of land by Joseph Thompson and was enclosed by a rock wall. An interesting note, a second influx of congregation members came from Ireland and their place of origin is noted on their headstones.

Vulnerability:

Both Liberty Hall and the Locus Grove Cemetery and subject to impacts of reduced funding from the State. This statewide trend exposes individual listings to possible destruction, adverse development and/ or neglect.

Camp Lawton

Value:

Georgia was home to a number of Civil War (1861-65) prisons. Though dwarfed by the ominous shadow of notorious Andersonville Prison, there were fifteen other facilities in the state. These ranged from county jails to armed guards surrounding prisoners in wooded areas. Prison sites were usually selected for their proximity to major transportation routes.

The most substantial prison holding former Andersonville captives was Camp Lawton in Millen, about forty miles south of Augusta. Union prisoners were transferred from Andersonville Prison to Camp Lawton in Millen after Sherman's attack on Atlanta in 1864. Camp Lawton was a stockade structure enclosing forty-two acres, making it the largest civil war prison in terms of area. Set only a mile off the Augusta Railroad, the pen was designed to hold up to 40,000 prisoners, although the population never grew too much beyond 10,000. By all accounts the prison at Millen was infinitely better than Andersonville. A generous spring ran north to south through the site, providing a fresh supply of drinking water. Rations were also more plentiful, since the countryside had yet to be scavenged of its food resources. Yet disease and death were not unknown, because many of the prisoners were terribly debilitated from their incarceration at Andersonville. During the short time the prison was open, from late September to early November 1864; nearly 500 prisoners succumbed to disease.

As Sherman's troops approached Millen in the March to the Sea, the prisoners had to be moved yet again. A large portion of these were sent to South Carolina, and other groups were sent to Savannah.

Vulnerability:

The exact site of Camp Lawton was not located until 2010, when its discovery by archaeology students at Georgia Southern University made national news. The find was significant because the site, previously unidentified and thus undisturbed yielded an unusually rich cache of artifacts left by prisoners and their guards. Researchers believe that many of the artifacts are possessions dropped by prisoners as they were forced onto trains during the camp's final evacuation. Jenkins County and the City of Millen are taking great care to oversee the excavation of the site, to ensure that its integrity is not compromised.

Heritage Resources
Appropriate Development Practices

The integrity of heritage resources is not entirely restricted to the resource itself; viewsheds and adjacent sites and structures can also contribute to, or detract from, a resource's historic value. Therefore, it is important to discuss appropriate development practices in regards to heritage resources and the areas surrounding them. Through the consideration and examination of the potential effects of any development undertaking (roads and infrastructure, demolition, rehabilitation of adjacent structures, infill development, redevelopment, etc.), the impacts to heritage resources and their environs can at least be lessened, if not completely negated.

The following are recommended best management practices for appropriate development intended for use by local governments, or developers when designing new developments within a one-mile radius of Regionally Important Heritage Resources. This listing will also be used by the CSRA Regional Commission for reviewing Developments of Regional Impact located within one mile of these resources.

- Maintain existing street grid patterns and uniform alignment of facades in new construction by orienting new structures at similar setbacks and lot configurations as existing structures (i.e. parallel to lot lines, not at an angle; orienting primary facades toward the street; aligning building front at street edge).
- Minimize the visual and environmental impacts of parking through careful consideration of location, materials and screening, to make the areas more attractive and pedestrian-friendly.
- Employ cluster development practices and techniques to preserve open space within the development site.
- Enlist significant site features including view shed corridors, trees, and existing heritage resources, as amenities that shape the identity and character of new, infill, and re-development.
- Site plans, building design, and landscaping should be sensitive to cultural and natural features of the site, including topography and views.
- Use infrastructure availability to steer development away from areas of natural, cultural, historic, and environmentally sensitive resources.
- New construction and infill development should appear similar in mass and scale to historic structures traditionally found in the area, and floor-to-floor heights, particularly on the first floor, should appear to be similar to those seen traditionally.
- The literal imitation of historic styles is strongly discouraged. New construction, additions, and infill development should be compatible, but not identical, to historic buildings. Creativity of design and contemporary interpretations of

historic buildings, which are similar in scale and overall character, is encouraged.

- New construction should be distinguishable as being new so as not to lend a false sense of history and impede the ability to interpret the historic character of an area.
- Signage should be coordinated with the architecture of the buildings, be predominately pedestrian in scale, and lighting and color of the signs be strictly controlled.

Heritage Resources
General Policies and Protection Measures

The following General Policies and Protection Measures are best practice recommendations for the appropriate management of the Regionally Important Heritage Resources identified in this Plan. They are intended to provide guidance, direction, and assistance to local government officials and community leaders in planning and decision making that affects the identified Regionally Important Heritage Resources. The CSRA Regional Commission will also utilize these policies and protection measures when reviewing local comprehensive plans for consistency with regional plans and to encourage local governments in the region to adopt protection measures, policies, and enhancement activities most appropriate for the protection of the resources located within particular communities.

- Preserve, protect, and promote the CSRA region's unique heritage resources that contribute to the region's distinctive character.
- The protection and conservation of the Regionally Important Heritage Resources will play an important role when planning for and making decisions about future growth and development.
- Encourage the maintenance of all heritage buildings, sites, structures, districts, and objects and their adaptive reuse, when appropriate.
- Support recognition of exemplary preservation, rehabilitation, and adaptive reuse of heritage resources.
- Encourage and support increased development of historic sites as tourist attractions, when practical and appropriate.
- Support and cooperate with federal, state, and local historic preservation agencies, commissions, and organizations in their efforts to preserve and protect CSRA's heritage resources. Such organizations include but are not limited to:

    1. United States Department of the Interior, Advisory Council on Historic Preservation,
    2. National Trust for Historic Preservation, Georgia Historic Preservation Division,
    3. Georgia Trust for Historic Preservation, CSRA Historic Preservation
    4. Advisory Council, local preservation non-profit organizations, Main Street and Better Hometown organizations, and local historic preservation commissions.

- Maintain and strengthen, where appropriate, regulations and incentives that protect the regions' heritage resources from inappropriate infill development, incompatible alterations or destruction.

- Establish regulations and incentives, where none currently exist, to protect the region's heritage resources from inappropriate infill development, incompatible alterations, or destruction.
- Support decisions on new and re-development that contribute to, not detract from, the region's character, identity, and sense of place.
- Encourage development that is sensitive to the historic context, sense of place, and overall setting of the community.
- Recognize that heritage resources are inherently valuable to a community's character and identity and make every effort to ensure their continuity for the enjoyment and education of future generations.
- Protect valuable heritage resources from encroachment by encouraging new development to be suitably located, contextually sensitive, and give consideration to adjacent, existing developments.
- Encourage the adherence to the *Secretary of the Interior's Standards for the Treatment of Historic Properties* in all projects involving heritage resources. The parks and forestry resources addressed in this section represent those resources

Fort Gordon

Located just outside Augusta, Georgia, in the United States of America, Fort Gordon is a military installation that carries out the missions of and is home to the U.S. Army Signal Center, Southeast Regional Medical, Dental and Veterinary Commands, the only remaining Army Dental Laboratory, Army Medical and Dental Residency Programs, Dwight David Eisenhower Army Medical Center, Joint Strategic Intelligence Operations, Communications and Military Intelligence Tenant Units, U.S. Army Reserve/National Guard Training, U.S.A.F. Air Reserve heavy-drop training and Homeland Security Training.

What began as Camp Gordon in 1941 during World War II has grown to be the "Home of the Signal Corps". Fort Gordon, or Camp Gordon, as it was known in 1941, was initiated for infantry and armor training for World War II soldiers. Fifteen years later in 1956, Camp Gordon was designated Fort Gordon, making it a permanent military installation and giving a boost to the local economy in Augusta, Georgia and Columbia County, Georgia. During these 62 Years, the installation has undergone numerous reorganizations, but it is known around the world as the "Home of the Signal Corps."

Value: Fort Gordon has approximately 30,000 military and civilian employees and currently has an estimated $1.1 billion economic impact on the Augusta-Richmond County economy

Vulnerability: Increases in population and economic activity draw more people toward the noise and accident risk areas generated by military training. Adjacent development should be given a greater level of scrutiny, especially in the consideration of residential land uses.

Fort Gordon
Appropriate Development Practices

Fort Gordon has a long-standing presence in the Central Savannah River Area (CSRA) and the cities and counties around Fort Gordon have grown over the years, reinforcing the close relationship between military and civilian communities. The Fort is critical to the CSRA economy, generating thousands of jobs and billions of dollars in economic activity and tax revenue. Similarly, Fort Gordon service members and civilian employees enjoy the region's great quality of life.

Therefore, it is important to discuss appropriate development practices in regards to Fort Gordon and the areas surrounding them. Through the consideration and examination of the potential effects of any development undertaking (roads and infrastructure, demolition, rehabilitation of adjacent structures, infill development, redevelopment, etc.), the impacts to heritage resources and their environs can at least be lessened, if not completely negated.

The following are recommended best management practices for appropriate development intended for use by local governments, or developers when designing new developments within a one-mile radius of Fort Gordon. This listing will also be used by the CSRA Regional Commission for reviewing Developments of Regional Impact located within one mile of these resources.

- Local governments abutting all military installations are required to coordinate with installations in considering the impact of zoning decisions on military operations. The law requires local governments solicit a written recommendation from a military base's commanding officer when there is a proposed change in zoning or special exception of property that is within 3,000 feet of the installation.
- Flexible zoning, such planned unit developments, which reduce post impacts through innovative cluster/site design.
- Strategic placement of ranges and other training facilities to minimize noise impacts, resulting in reduced noise effects off-post.
- Restrict certain types of training during certain times to limit noise exposure on nearby communities.
- Site plans, building design, and landscaping should be sensitive to proximity of a military training base.
- Use infrastructure availability to steer development away from areas of natural, cultural, historic, and environmentally sensitive resources.
- Improve existing community relations and education programs to ensure residents are kept informed about operational changes that may alter the noise and burn environment.

- Explore all available options for acquisition of strategic properties (i.e. purchase of development rights, transfer of development rights, fee simple purchase, etc.).
- Update local planning documents to incorporate JLUS recommendations.
- Adopt noise and smoke disclosures in Noise Zone I and II and within a 1-mile radius of Fort Gordon as part of the rezoning process.
- Provide noise contour layer in parcel mapping available to residents.

Fort Gordon
General Policies and Protection Measures

The following General Policies and Protection Measures are best practice recommendations for the appropriate management of Fort Gordon, identified as a Regionally Important Resource in this Plan. They are intended to provide guidance, direction, and assistance to local government officials and community leaders in planning and decision making that affects the identified Regionally Important Resource. The CSRA Regional Commission will also utilize these policies and protection measures when reviewing local comprehensive plans for consistency with regional plans and to encourage local governments in the region to adopt protection measures, policies, and enhancement activities most appropriate for the protection of the resources located within particular communities.

- Support the efforts of the Georgia Military Affairs Coordinating Committee (GMAC) and state legislation to protect Georgia military installations from encroachment.
- Stated policies to guide targeted growth away from areas that interfere with Fort Gordon's training areas.
- Local government planning staffs serve jointly with Fort personnel on installation environmental planning committees.
- Comprehensive plan language explicitly promoting land use coordination with Fort Gordon.
- Provide Fort Gordon a direct role in local transportation planning.
- Provide schedule of range activity to local media consistent with security constraints.
- Maintain and strengthen, where appropriate, regulations and incentives that protect the regions' heritage resources from inappropriate infill development, incompatible alterations or destruction.
- Promote and encourage new population growth and land development (especially planned unit developments) in urban areas and areas already served by infrastructure and community facilities.
- Establish regulations and incentives, where none currently exist, to protect the Fort from inappropriate infill development, incompatible alterations, or destruction.
- Support decisions on new and re-development that contribute to, not detract from, the region's character, identity, and sense of place.
- Encourage development that is sensitive to the historic context, sense of place, and overall setting of the community.

Identification of Regionally Important Resources

The criteria for determining Regionally Important Resources allows for a concise snapshot of the value of each resource to the CSRA. In recognizing the value of these resources, consideration is also given to their potential vulnerabilities. Nominations included descriptions of the resource's vulnerabilities and the degree to which the resource is threatened or endangered. Review of the nominations for each resource provided a similar snapshot in regard to vulnerability.

The Resources included in this plan were identified through nominations from interested parties as well as by mapping critical environmental areas identified by the Georgia Department of Natural Resources; they also include currently preserved natural or cultural areas. The Resources not nominated by an Individual, Interested Organization, or Local Government were selected by DCA Rules for Identification of Regionally Important Resources and approved for inclusion by the CSRA Commission Regional Board. All resource nominations submitted for inclusion in this plan were approved.

Value Matrix for Regionally Important Resources	DCA Rules for Identification of Regionally Important Resources			
RESOURCE [1]	Resource Nominated by an Individual, Interested Organization, Local Government/ Governmental Agency	Resource Identified by the Georgia Department of Natural Resources as a State Vital Area	A Natural or Cultural Resource that is Already Preserved by an Existing Conservation Mechanism	A Natural or Cultural Resource Identified by Other State Agencies and/ or Environmental Protection Organization
AREAS OF CONSERVATION AND/ OR RECREATIONAL VALUE				
Water Supply Watersheds		X	X	
Groundwater Recharge Areas				
Wetlands			X	
River Corridors		X	X	
Regional Reservoirs [2]		X		X
National Park Service Sites		X		X
State Parks and Other Recreation Areas		X		X
HISTORIC AND CULTURAL RESOURCES				
Historic Districts		X		
Historic Courthouses		X		
Kettle Creek Battlefield[3]	X	X		
Augusta Canal				
Mitchell Depot[4]	X	X		
Lucy Craft Laney Museum[5]	X	X		X
AH Stephens Historic Site[6]	X			

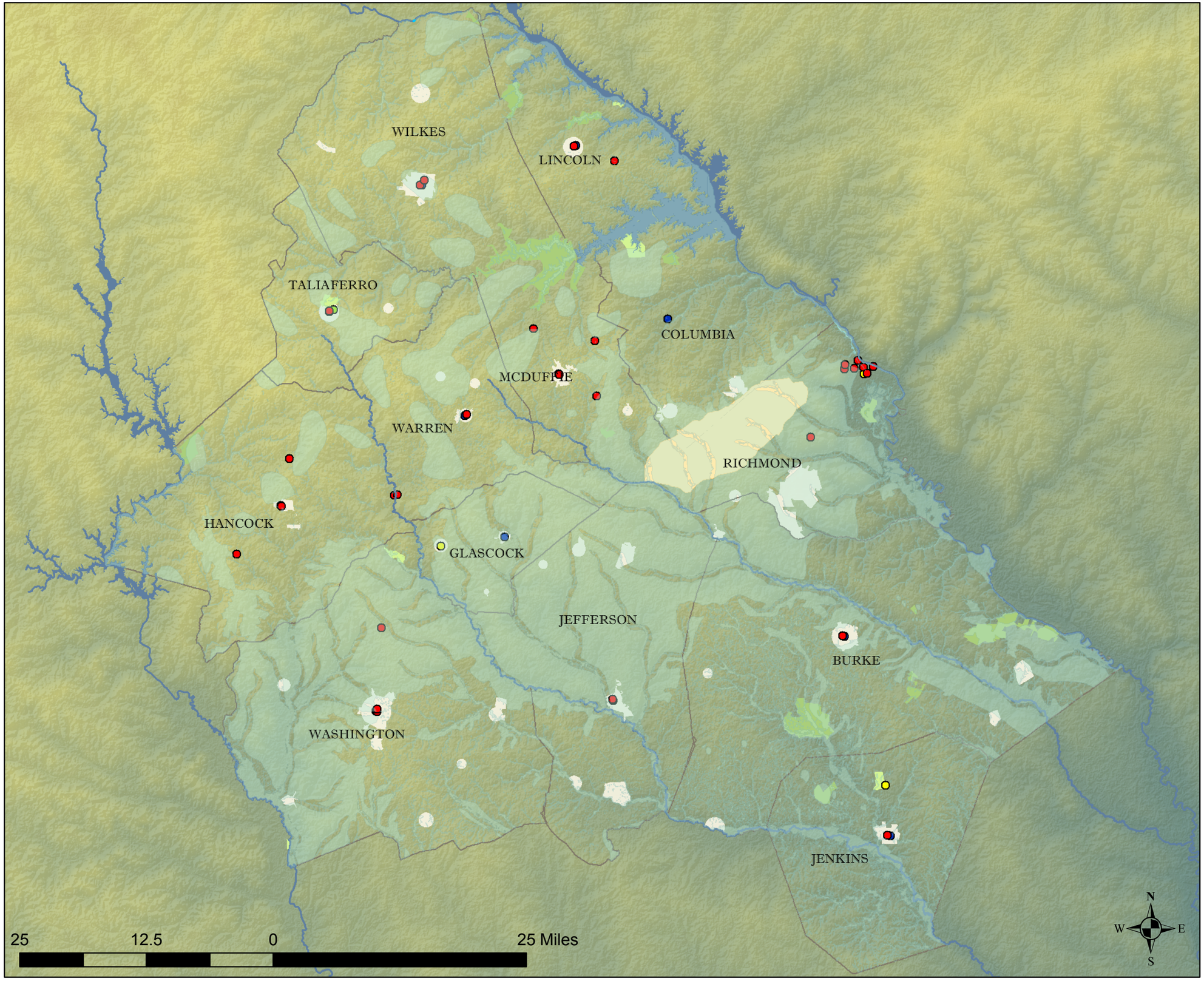
[1] Unless otherwise noted all resources included in the Plan were selected for inclusion by the CSRA Regional Board
[2] While grouped with Regional Reservoirs, Clark Hill Lake was nominated by Fred Guerrant, Director of the McDuffie County Planning Commission
[3] Nominated by W.E Burns, Mayor, City of Washington
[4] Nominated by Mayor Scott Lamb, Town of Mitchell
[5] Nominated by Christine Miller-Betts, Executive Director of the Lucy Craft Laney Museum
[6] Nominated by Jane Hubert, City of Crawfordville

Vulnerability Matrix for Regionally Important Resources	**Development Pressures**				**Environmental Degradation**				**Resource Management**			
RESOURCE	Threatened by destruction of subsurface resources such as archaeological sites	Fluctuations in land values threatens economic viability of current use	Threatened by adjacent development that is incompatible in terms of design, scale or land use	Destruction of significant viewshed	Adverse impact on wildlife/ Loss of biodiversity	Threatened by destruction of subsurface resources such as archaeological sites	Threatened by erosion and/ or stormwater run-off flows	Threatened by overuse of resource (i.e. inappropriate recreational use, too much traffic, etc.)	Lack of protection through adequate regulations and/ or easements	Lack of enforcement of existing regulations	Lack of financial resources for appropriate stewardship	Lack of long term ownership plan/ transitional ownership
AREAS OF CONSERVATION AND/ OR RECREATIONAL VALUE												
Water Supply Watersheds					X	X	X			X		
Groundwater Recharge Areas												
Wetlands					X	X	X		X	X		
River Corridors					X	X	X		X	X		
Regional Reservoirs					X	X	X				X	
National Park Service Sites	X		X	X	X		X	X			X	X
State Parks and Other Recreation Areas			X	X	X			X			X	X
HISTORIC AND CULTURAL RESOURCES												
Historic Districts		X	X								X	X
Historic Courthouses		X	X	X					X			
Kettle Creek Battlefield											X	
Augusta Canal		X	X	X					X			X
Mitchell Depot	X								X		X	X
Lucy Craft Laney Museum	X		X						X	X		X

Regionally Important Resources Map

The RIR Map is a detailed illustration of all of the important natural and cultural resources located within the Central Savannah River Area region. It depicts Jurisdictional boundaries along with all resources called for in the DCA Rules for Regionally Important Resources as well as those resources nominated by stakeholders and determined to have sufficient value and vulnerability by the CSRA Regional Commission. All individually nominated resources are identified on the RIR map.

The map also identifies the "green infrastructure network" a series of layers which form a continuous encompassing a wide range of elements, including: wetlands, waterways, wildlife habitats, conservation lands, greenways and parks. This network maintains natural ecological processes, helps link urban settings to rural ones, and contributes significantly to the health and quality of life for the communities and citizens of the CSRA who share the network.



Legend

CSRA Regionally Important Resources

Resources

- Regionally Important Rivers
- Courthouse
- Cultural Resource
- Historic District
- State Park
- Green Infrastructure Network
- Cultural Resource
- Military
- State Park
- WMA
- Water Resource

Boundaries

- Counties
- City Limits

CSRA Regional Commission
GIS Department
3023 Riverwatch Pkwy, Ste A
Augusta, GA 30907
www.csrarc.ga.gov
May, 2011

Appendix A

REGIONAL STAKEHOLDERS

Augusta Archaeological Society
Augusta Canal Authority
Augusta Museum of History
Lucy Craft Laney Museum of Black History
Environmental Protection Division East Central District Office
Fort Gordon
Historic Augusta, Inc.
Morris Museum of Art
Savannah River Keepers
Watson-Brown Foundation, Inc.
Georgia Department of Natural Resources
Georgia 4-H Foundation
Georgia Trust for Historic Preservation
Burke County Board of Commissioners
Columbia County Board of Commissioners
Glascock County Board of Commissioners
Hancock County Board of Commissioners
Jefferson County Board of Commissioners
Jenkins County Board of Commissioners
Lincoln County Board of Commissioners
McDuffie County Board of Commissioners
Taliaferro County Board of Commissioners
Warren County Board of Commissioners
Washington County Board of Commissioners
Wilkes County Board of Commissioners
Augusta/Richmond County, Mayor and Council
Avera, Mayor and Council
Bartow, Mayor and Council
Blythe, Mayor and Council
Camak, Mayor and Council
Crawfordville, Mayor and Council
Davisboro, Mayor and Council
Dearing, Mayor and Council
Deepstep, Mayor and Council
Girard, Mayor and Council
Grovetown, Mayor and Council
Harlem, Mayor and Council
Harrison, Mayor and Council
Hephzibah, Mayor and Council
Keysville, Mayor and Council
Lincolnton, Mayor and Council
Louisville, Mayor and Council
Midville, Mayor and Council
Millen, Mayor and Council
Mitchell, Mayor and Council
Norwood, Mayor and Council
Oconee, Mayor and Council
Rayle, Mayor and Council
Riddleville, Mayor and Council
Sandersville, Mayor and Council
Sardis, Mayor and Council
Sharon, Mayor and Council
Sparta, Mayor and Council
Stapleton, Mayor and Council
Tennille, Mayor and Council
Thomson, Mayor and Council
Tignall, Mayor and Council
Vidette, Mayor and Council
Wadley, Mayor and Council
Warrenton, Mayor and Council
Washington, Mayor and Council
Waynesboro, Mayor and Council
Wrens, Mayor and Council

Appendix B

Regionally Important Resources Nominations

Georgia
Department of
Community Affairs

REGIONALLY IMPORTANT RESOURCES
NOMINATION FORM

REGIONALLY IMPORTANT RESOURCES are defined as any natural or cultural resource areas identified as being of regional importance. Following identification of these resources, the Regional Commission will prepare a *REGIONAL RESOURCE PLAN* recommending best practices for their protection and management. This *REGIONAL RESOURCE PLAN* will be used by the Regional Commission to promote coordination of activities and planning by local governments, land trusts, and conservation or environmental protection entities to better manage these resources. Resources identified through this process will be mapped and linked to form a continuous regional green infrastructure network. This network will be presented on a *REGIONALLY IMPORTANT RESOURCES MAP* that will be widely distributed throughout the region.

I. INFORMATION ABOUT PERSON OR ORGANIZATION SUBMITTING NOMINATION

Name:

Type of Organization (Please select the most appropriate category):

- ☐ **Land Trust**
- ☐ **Conservation/Environmental Protection Group**
- ☒ **Local Government**
- ☐ **Governmental Agency**
- ☐ **Individual**
- ☐ **Other: If other, please describe...**

CONTACT PERSON:	Jane Hubert		
ADDRESS:	P O Box 114 Crawfordville, GA 30631		
PHONE:	706-456-2229	**FAX:**	706-456-2904
EMAIL:	taliaferro@nu-z.net	**WEBSITE:**	

II. INFORMATION ABOUT NOMINATED RESOURCE

Name (if applicable):

A. H. Stephens State Park
A. H. Stephens Historic Site
Sharon CatholicCemetery-Oldest Catholic Cemetery in GA

Location
(Be as descriptive as necessary. Provide an address, latitude/longitude, GPS coordinates, or any information which would be required to physically locate the nominated resource):

Type of Resource (Please select all that apply):

- ☐ **Water**
- ☒ **Park**
- ☐ **Forest Preserve**
- ☐ **Wildlife Preserve**
- ☐ **Other Natural Resource(s): If other, please describe...**

- ☒ **Historic Resource**
- ☐ **Archeological Resource**
- ☒ **Other Cultural/Historic Resource(s): If other, please describe...**

REGIONALLY IMPORTANT RESOURCE NOMINATION FORM

Regionally Important Resources are defined as any natural or cultural resource areas possessing significant regional value and which are vulnerable to human actions or activities. The Regional Resource Plan will recommend the best practices for their protection and management

Information about Person or Organization Submitting Nomination:

Mayor, Scott Lamb 706 598-2004

Name of Organization/ Agency/ Government: Town of Mitchell

Address: P.O. Box 32, Mitchell, GA 30820

Contact Person: Etta Wilcher

Phone Number: 706-598-3414

Email Address: egwilcher@att.net

Information about Nominated Resource:

Name of Resource: Mitchell Depot Historical Museum

Location: Hwy. 102, Mitchell, GA

Category (check one): ___ Natural Resource (Water, Parks, etc.) ✓ Cultural/ Historic Resource

Briefly describe the importance of this resource and its value to the Central Savannah River Area:

This bldg. is the old train depot that served the old Augusta, Gibson, Sandersville RR. It later became The Augusta Southern. Mitchell was named for its president, Robert Mitchell. It holds quite a collection of items used many years ago.

Briefly describe how, and to what degree this resource is threatened or endangered:

Walls not sealed, therefore it gets extremely hot/cold due to cracks in original walls. The extreme heat will take its toll especially on paper items.

Please return no later than **June 4, 2010** to:

CSRA Regional Commission
3023 River Watch Parkway, Suite A
Augusta, GA 30907
Fax (706) 210-2006
Attn: Akosua Cook

Feel free to attach additional pages, maps, etc.

REGIONALLY IMPORTANT RESOURCE NOMINATION FORM

Regionally Important Resources are defined as any natural or cultural resource areas possessing significant regional value and which are vulnerable to human actions or activities. The Regional Resource Plan will recommend the best practices for their protection and management

Information about Person or Organization Submitting Nomination: W E Burns

Name of Organization/ Agency/ Government: City of Washington, W.E. Burns, Mayor

Address: P.O. Box 9, Washington, GA 30673

Contact Person: David Jenkins

Phone Number: 706 678 3277

Email Address: DJenkins@washingtonwilkes.org

Information about Nominated Resource:

Name of Resource: Kettle Creek Battlefield

Location: 33° 41' 28" N 82° 53' 10" W

Category (check one): ___ Natural Resource (Water, Parks, etc.) ✓ Cultural/ Historic Resource

Briefly describe the importance of this resource and its value to the Central Savannah River Area:

See Attached email

Briefly describe how, and to what degree this resource is threatened or endangered:

See Attached email

Please return no later than **June 4, 2010** to:

CSRA Regional Commission
3023 River Watch Parkway, Suite A
Augusta, GA 30907
Fax (706) 210-2006
Attn: Akosua Cook

Feel free to attach additional pages, maps, etc.

REGIONALLY IMPORTANT RESOURCE NOMINATION FORM

Regionally Important Resources are defined as any natural or cultural resource areas possessing significant regional value and which are vulnerable to human actions or activities. The Regional Resource Plan will recommend the best practices for their protection and management

Information about Person or Organization Submitting Nomination:

Name of Organization/ Agency/ Government: McDuffie County Planning Commission

Address: P.O. Box 7, Thomson, Ga. 30824

Contact Person: Fred Guerrant, Director

Phone Number: (706) 595-5355

Email Address: fguerrant@thomson-mcduffie.~~e~~net

Information about Nominated Resource:

Name of Resource: Clark Hill Lake

Location: Savannah River Basin

Category (check one): ✓ Natural Resource (Water, Parks, etc.) ___ Cultural/ Historic Resource

Briefly describe the importance of this resource and its value to the Central Savannah River Area:

Clark Hill provides regional water resources for current and anticipated residential, commercial, and industrial growth as well as a recreational resource and promoting tourism.

Briefly describe how, and to what degree this resource is threatened or endangered:

This resource is threatened by the intra-basin transfer of water rights, and poor management by the Corp. of Engineers in providing adequate water levels to adequately support the above activities.

Please return no later than **June 4, 2010** to:

CSRA Regional Commission
3023 River Watch Parkway, Suite A
Augusta, GA 30907
Fax (706) 210-2006
Attn: Akosua Cook

Feel free to attach additional pages, maps, etc.

Regionally Important Resource Nomination Form

Regionally important Resources are defined as any natural or cultural resource areas possessing significant regional value and which are vulnerable to human actions or activities. The Regional Resource Plan will recommend the best practices for their protection and management.

Information about Person or Organization Submitting Nomination:

Name of Organization/Agency/Government: Lucy Craft Laney Museum of Black History

Address: 1116 Phillips Street, Augusta, GA 30901

Contact Person: Christine Miller-Betts, Executive Director

Phone Number: (706) 724-3576

Email Address: chrisbetts@comcast.net

Information about Nominated Resource:

Name of Resource: Lucy Craft Laney Museum of Black History

Location: 1116 Phillips Street, Augusta, GA 30901

Category (check one): __Natural Resource (Water, Parks, etc.) X__Cultural/Historic Resource

Briefly describe the importance of this resource and its value to the Central Savannah River Area:

(see attached)

Briefly describe how, and to what degree this resource is threatened or endangered:

(see attached)