



South Carolina Resilient Coastal Forests

Benefits Report



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Project Overview

Coastal forests are important ecological, historical and cultural habitat that are imperiled by a wide range of threats that can impact their abundance, distribution, composition and intactness. Coastal forests are at risk from unprecedented challenges such as sea-level rise and climate change, but many of the U.S.'s coastal areas are experiencing high urban growth rates leading to forest clearing to make room for new housing and industry. Weather-related threats such as hurricanes, flooding and wildfire are increasing in intensity and frequency as global temperatures increase. Increasing global temperatures also influence the distribution and life cycles of plants, animals, pests and diseases causing unforeseen impacts to coastal forest quality. Even some widespread climate solutions to address greenhouse gas emissions, such as development of utility-scale solar energy, may conflict with coastal forests as land is sought for new solar farms.

The pressures facing coastal forests make it imperative that federal, state and local governments, nonprofits, universities, businesses, forest landowners and community members be informed about what is at stake and what could be lost. This pilot study was designed to create a landscape-scale conservation planning process unique to coastal forests of the southeast United States. The pilot study includes an inventory of coastal forest resources and assets, an analysis of the benefits these forests provide, an evaluation of the various threats and their level of risk to coastal forests, engagement of local and state stakeholders about these threats, prioritization of existing forests and the development of management strategies to mitigate or adapt to future impacts.



Resilient Coastal Forest Study Area South Carolina

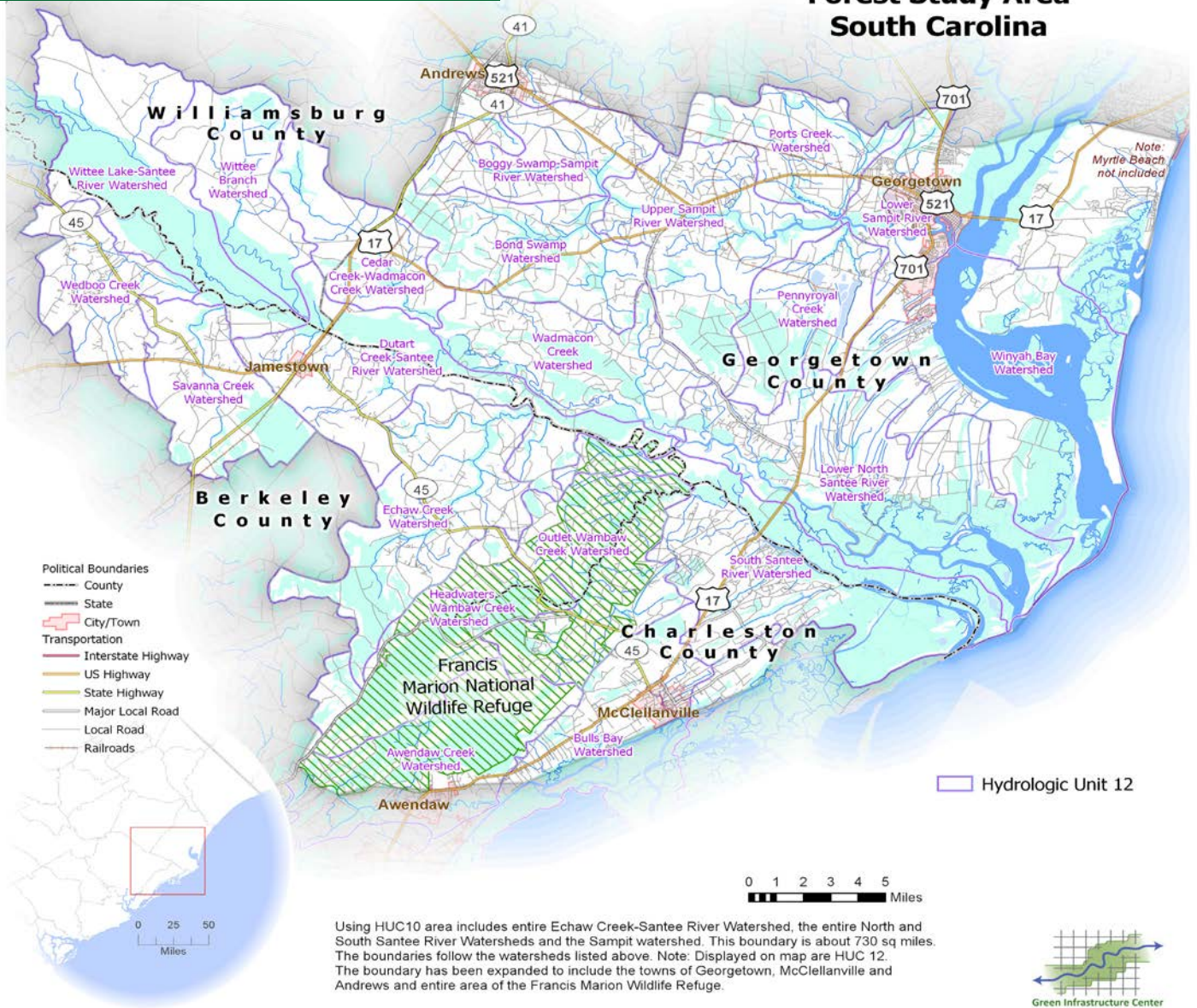


Figure-1: A map outlining the South Carolina Resilient Coastal Forest study area.

The study area for South Carolina is composed of 4 counties in part (Berkeley, Charleston, Georgetown and Williamsburg) and 4 cities and towns (Andrews, Georgetown, Jamestown and McClellanville). The study area boundary was chosen by staff with the South Carolina Forestry Commission and contains a mix of rural, suburban and urban land uses. The study area is bisected by the Santee River, with the vast majority of land south of the river under federal ownership as the Francis Marion National Forest. To the north of the Santee River is a mix of private commercial forestland and agriculture. Urban land uses mainly occur along U.S. Highway 17 and U.S. Highway 251 with the rest of the study area having a rural character. The coastline is made up of several wildlife refuges and reserves under various federal, state and nongovernmental organizational ownerships which protect marine and estuary resources and maritime forests. A mix of land uses, ownership status and urban growth patterns was chosen to evaluate different development pressures on coastal forests. This mix is intended to demonstrate the different opportunities and challenges to coastal forests and requires the engagement of diverse stakeholders and community types.

Introduction to Coastal Forest Benefits

This benefits' report is a partial assessment of natural resource assets related to coastal forests. It analyzes the benefits coastal forests provide to the environment and communities that reside within and around those forests. By identifying and quantifying the role and benefits coastal forests play in a region, these data can be used by local stakeholders to understand the extent of services, justify decision-making when protecting or conserving forests, utilize data in local planning decisions, educate the public and build support and political will from the community to effect necessary change.

What do we mean by benefits?

Coastal forests provide valuable ecosystem services. These services are further classified into supporting services, regulating services, provisioning services, and cultural services. Each type of service is dependent on the functional role the forests play in the environment and human society. Supporting services are nutrient cycling, soil formation, pollination, and habitat, while regulating services are air and water purification, decomposition, carbon sequestration and storage, and flood protection. Provisioning services, oftentimes referred to as ecosystem goods, are tangible forest products, such as timber, paper, medicines, foods, biofuels, and genetic material. Cultural services examples are recreation, science and education, historical or natural heritage sites, and spiritual practices associated with natural places and symbolism.

This benefits report quantifies many of the services described, with a particular focus on the role of coastal forests in providing regulating, provisioning, and cultural services. The study area's land cover was mapped using remote sensing techniques from aerial photographs and geographical information system (GIS) data layers publicly available or shared by committee partners

from national, state, and local groups. Rural areas were mapped at a 10-meter pixel resolution, while urban areas were mapped at a finer resolution of 1-meter pixels. Benefits' calculations were derived from the land cover and by using published multipliers from the U.S. Forest Services i-Tree multipliers specific for the study region (i-Tree County multipliers). Other values were sourced from GIS datasets shared by local partners or published datasets.

361,987 acres of total forest cover.

Total forest cover makes up 69% of land cover in the study area, with wooded wetlands and evergreen forests being the predominant forest types in the region at 35% and 32% respectively (see Table-1).

Table-1: Number of acres and percent land cover, by type.

Land Cover Type	Acres	Percent Cover
Deciduous Forest	7,765	1.5%
Evergreen Forest	170,053	32%
Mixed Forest	241	0.05%
Wooded Wetland	183,928	35%
Wetland	54,668	10%
Pervious	70,010	13%
Developed	5,899	1%
Impervious	1,101	0.2%
Water	33,401	6%
Total	527,066	100%

Source: National Land Cover Database, 2016



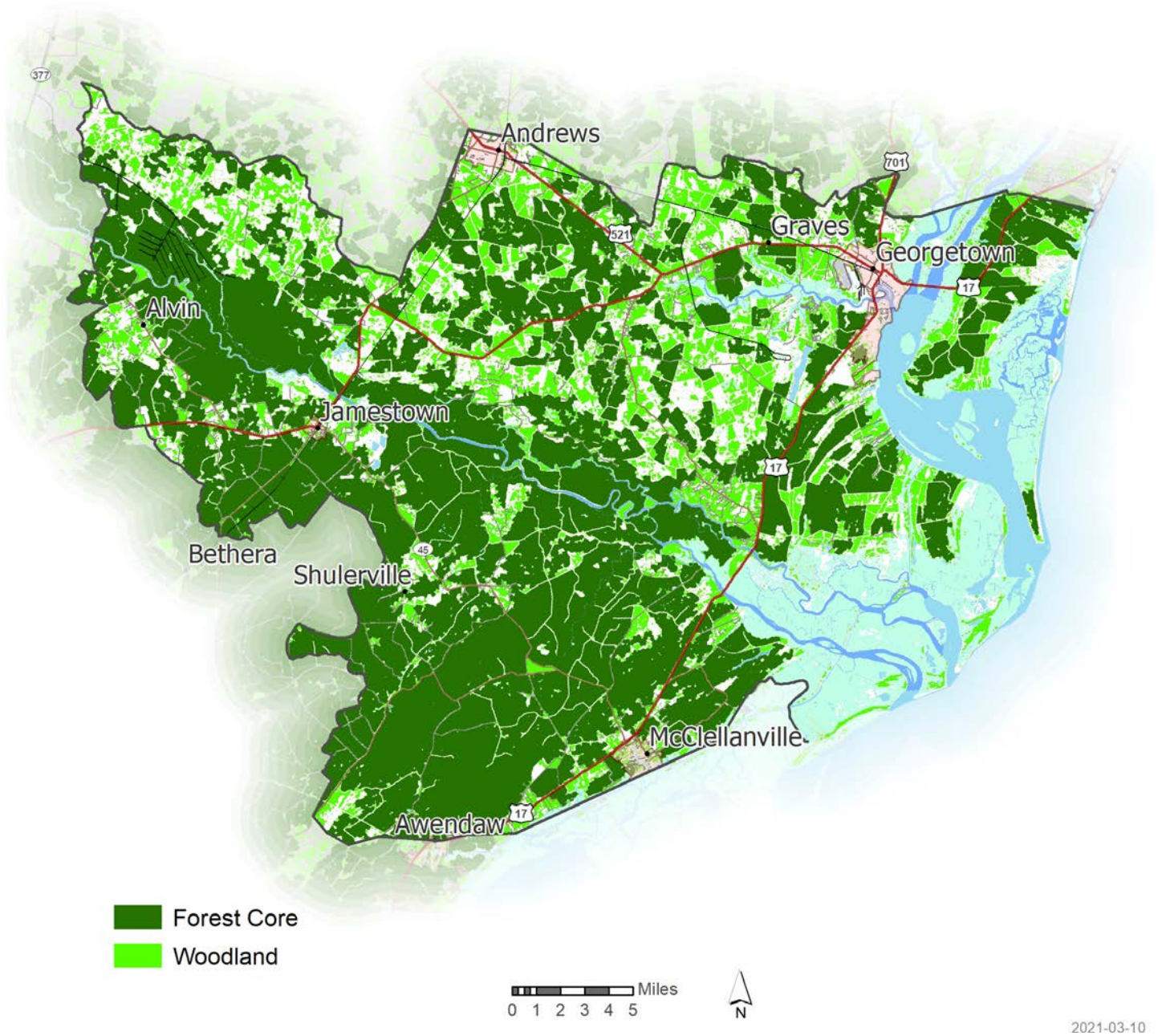


Figure-2: A map displaying the coastal forest cores (forests larger than 100 acres in size) and woodlands (forests smaller than 100 acres in size but larger than 10 acres).

Benefits of Urban Tree Canopy

As part of the analysis, GIC mapped tree canopy cover at 1-meter resolution for each of the cities and towns located within the study area. Tree canopy values for each city or town can be found in Table-3. In cities and towns, urban tree canopy provides many community health benefits by reducing air and water pollution, sequestering carbon, mitigating urban heat island effects and reducing standing water and stormwater runoff.

For this study, the reduction in air pollution and carbon sequestration and storage were calculated for the study area's urban forests. Mitigating air pollution in urban settings is critical to avoid long-term health impacts to residents and to meet federal air-quality standards.

Many cities are developing Climate Action Plans to support sustainability measures, such as energy efficiency, urban cooling and reducing greenhouse gas emissions. Coastal forests, in both urban and rural settings, play a key role in mitigating greenhouse gas emissions. Forest land conversion accounts for 25% of global emissions.

Coastal forests sequester hundreds of thousands of tons of carbon dioxide from the atmosphere annually and play a significant role in mitigating future impacts of climate change on the surrounding communities (see Table-2). Trees sequester carbon which forms greenhouse gases such as sulphur dioxide and carbon dioxide, thereby reducing sources of global warming. Storing carbon and preventing its release is another way that trees mitigate the impacts of climate change. Coastal forests play an even larger role in preventing greenhouse gas formation by also sequestering carbon in the soil and thick organic layer of the forest floor.

Besides the role coastal urban forests play in regulating environmental impacts, these same forests directly and indirectly provide cultural services in the form of health benefits through

recreation and promoting behaviors that encourage physical activity in communities. Parks and green spaces account for a significant amount of a population's moderate-to-vigorous physical activity, with an average of 5,300 hours per week spent on exercise in some neighborhood parks in the Los Angeles, CA, area. (Kim et al 2016). And it is not just greenspaces in communities that promote these behaviors. Tree canopy alone is shown to be an effective influencer on physical activity. A higher density of street trees (at the 75th vs 25th percentile) in low-income neighborhoods was associated with a 12% lower prevalence of obesity in

Table-2: Carbon sequestration and storage for each locality using U.S. Forest Service's *iTree* County multipliers.

Localities	Tons/YR	Tons
County/City	CO2seq	CO2stor
Andrews	1,181	28,983
Berkeley County	475,954	11,835,030
Charleston County	318,603	8,632,815
City of Georgetown	5,769	141,519
Georgetown County	821,455	20,150,630
Jamestown	1,178	29,290
McClellanville	3,954	107,136
Williamsburg County	206,786	4,682,724
Study Area Total	1,834,880	45,608,127

Source: *iTree* County, U.S. Forest Service



Trees soak up carbon dioxide from the atmosphere helping to reduce greenhouse gases that cause climate change.

Benefits of Urban Tree Canopy

children between the ages of 3-5 years in New York City (Lovasai et al 2013). Furthermore, a higher density of street trees was positively associated with longer walking times. Individuals walked a median value of 32 minutes longer on streets with a high density of trees than on streets with a lower density (Vich et al 2019).

In addition to urban forests' role in promoting physical activity, the scientific literature shows a correlation between tree canopy or greenspaces and improved mental health and faster healing from illnesses. Patients recovering from surgery in hospital rooms with views of nature have shorter hospital stays, receive fewer negative evaluations, and take fewer pain-relieving medicines than patients in rooms with windows facing a brick wall (Ulrich 1984). Visual exposure to settings with trees helps recovery from stress within five minutes, as indicated by changes in blood pressure and muscle tension (Ulrich 1984).

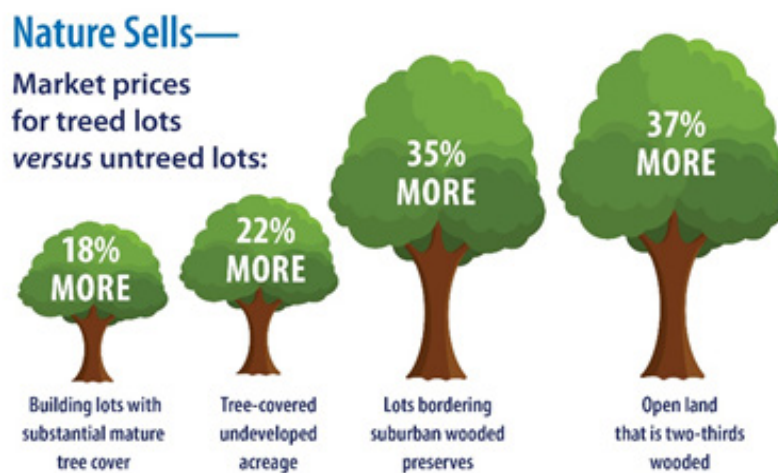
Finally, trees play a significant role in urban economies by increasing property values, which translates into a greater tax base for local governments. In one study, it was demonstrated that trees can increase residential property values by up to 37% (Foster et al 2011).

Trees also influence consumer spending patterns. They provide more attractive areas for

development, and improve the character and charm of historic districts and commercial areas by giving opportunities for people to interact with nature. A study by the University of Washington found that people shopped longer and more often in tree-lined retail areas and spent about 12% more money in large cities and 9% more in small cities (Wolf 2007). In addition, trees and areas of urban coastal forest cover contribute to the livelihood and economic well-being of cities and towns by drawing in tourists and indirectly supporting economic development in communities.



Businesses benefit from tree canopy by making shopping areas more aesthetically pleasing thereby attracting customers.



Source: Kathleen Wolf, 2007, *City Trees and Property Values*.

**Andrews, SC
Tree Canopy**

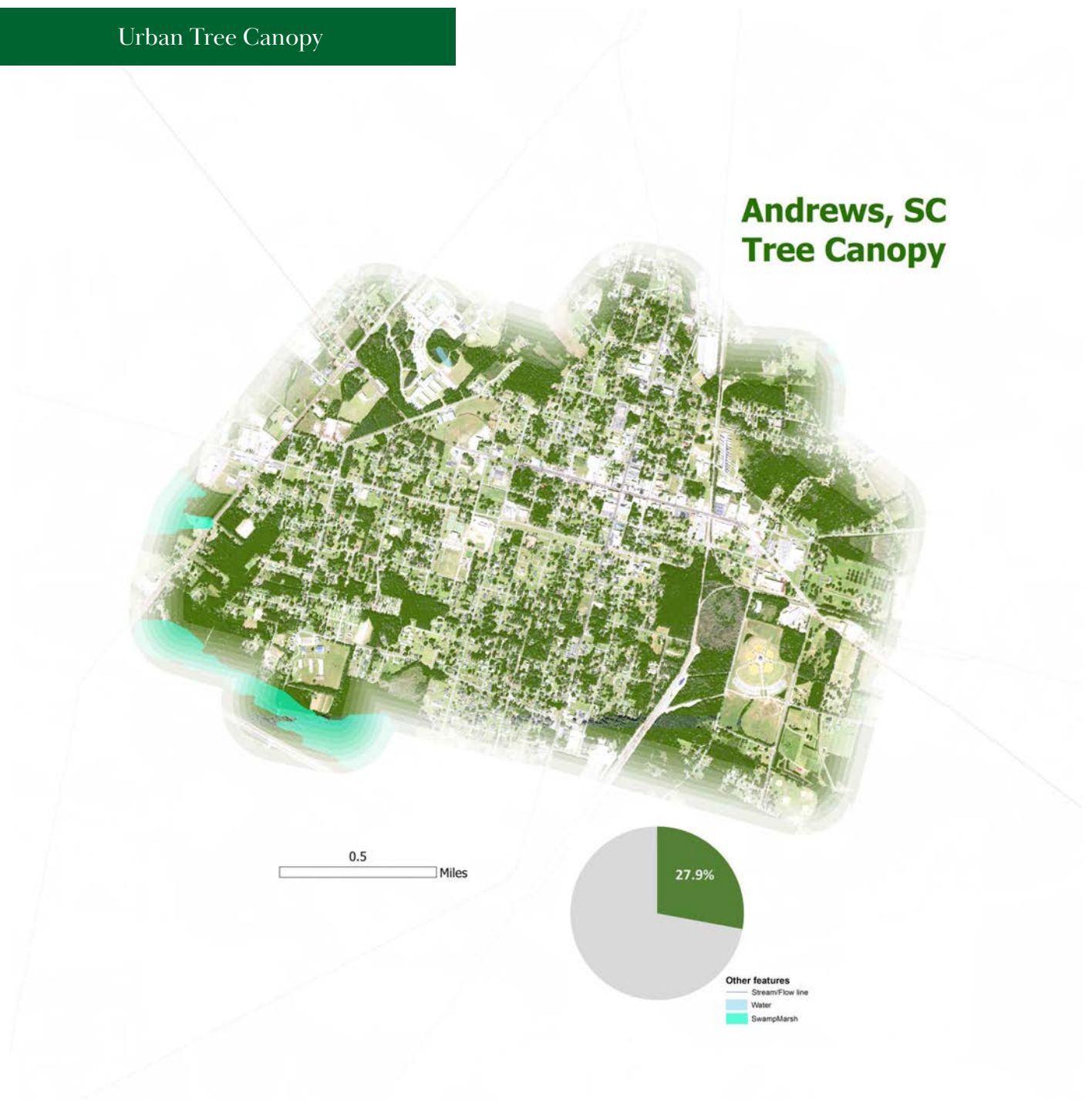


Figure-3: A map showing the extent of urban tree canopy for the town of Andrews.

Georgetown, SC Tree Canopy

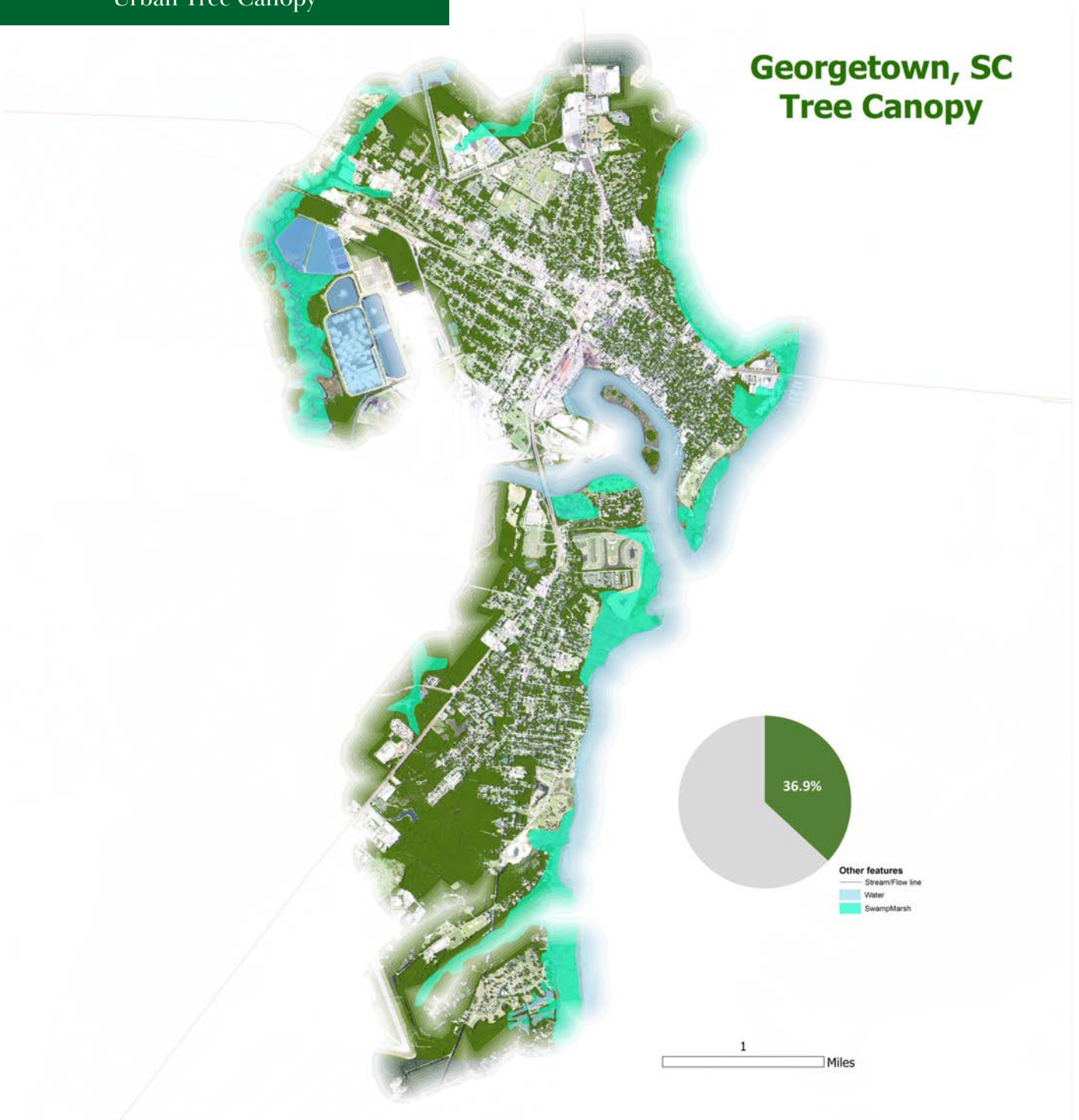


Figure-4: A map showing the extent of urban tree canopy for the city of Georgetown.

Jamestown, SC Tree Canopy

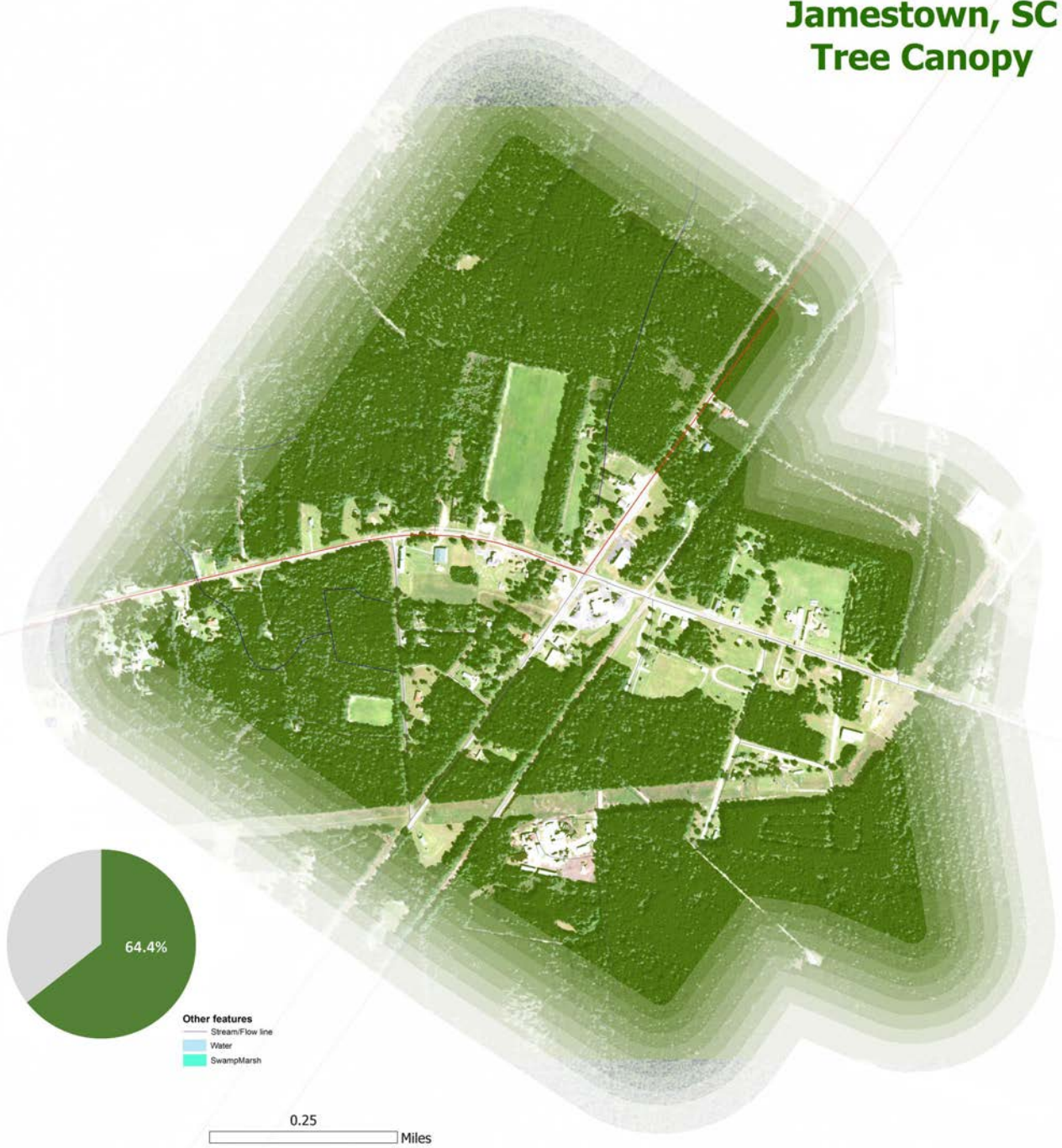


Figure-5: A map showing the extent of urban tree canopy for the town of Jamestown.

McClellanville, SC Tree Canopy

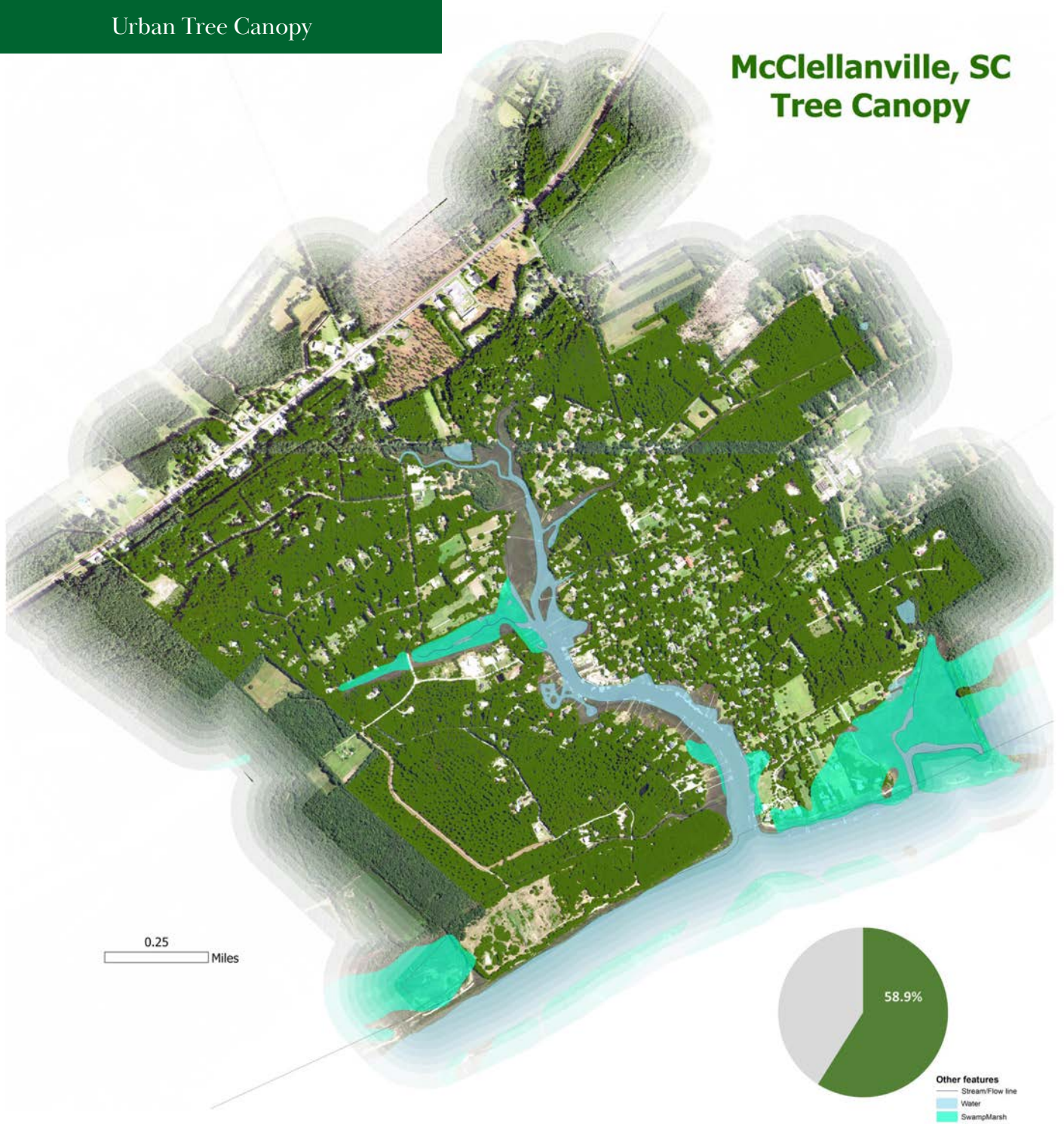


Figure-6: A map showing the extent of urban tree canopy for the town of McClellanville.

Benefits to Air Quality

For this study, the reduction in air pollution and carbon sequestration and storage were calculated for the study area's urban forests. Mitigating air pollution in urban settings is critical to avoid long-term health impacts to residents and to meet federal air-quality standards.

Trees mitigate the impacts of air pollution through a number of different mechanisms. For

example, they cool surface temperatures, by shading impervious surfaces that hold and radiate heat, thereby reducing the conversion of some air pollutants, such as nitrogen dioxide, into ground-level ozone. Trees also capture small particulate matter on their leaves or sequester pollutants through gas exchange, effectively removing these substances from the atmosphere. Even at the neighborhood level, trees reduce pollutants. Well-treed neighborhoods suffer less respiratory illnesses, such as asthma (Meenakshi et al 2014).

Table-3: Air quality pollutant reductions for each locality using U.S. Forest Service's i-Tree County multipliers.

County/City	Canopy Area (Acres)	CO Carbon monoxide LB/YR	NO2 Nitrogen dioxide LB/YR	O3 Ozone LB/YR	PM2.5 Particulate Matter (2.5 microns) LB/YR	PM10 Particulate Matter (10 microns) LB/YR	SO2 Sulphur dioxide LB/YR
Andrews	226	67	443	14,732	63	3,415	381
Berkeley County	94,465	25,732	640,076	5,953,288	303,886	1,851,993	273,439
Charleston County	68,998	19,592	142,271	4,581,835	239,872	1,306,643	121,043
City of Georgetown	1,103	325	2,162	71,935	309	16,675	1,862
Georgetown County	157,057	46,323	307,822	10,242,655	44,036	2,374,339	265,152
Jamestown	234	64	1,584	14,734	752	4,583	677
McClellanville	856	243	1,766	56,862	2,977	16,216	1,502
Williamsburg County	38,644	10,644	75,299	2,236,779	151,260	480,169	63,588
Study Area Total	361,624	102,991	1,171,422	23,172,820	743,156	6,054,033	727,644

Source: i-Tree County, U.S. Forest Service



Benefits to Water Resources

Forests provide numerous services for the regulation of flooding and provisioning of clean and safe drinking water to communities. Forest buffers along riparian corridors filter out sediment and nutrients that contribute to poor water quality, while shading and cooling water for aquatic life. Tree roots and the forest duff layer soak up rainfall and infiltrate water into the ground, preventing it from becoming surface flow runoff. By infiltrating rainfall into the ground, forests play a vital role in groundwater recharge, replenishing aquifer systems that communities rely on for drinking water sources. Coastal forests and forested wetlands capture and store flood waters and slowly infiltrate it back into the ground, acting as reservoirs that regulate flooding.

Coastal forested wetlands or “swamps” possess thick, nutrient rich organic soils that support flood tolerant tree species such as Carolina ash, water tupelo, red maple and bald cypress. Forested wetlands play a critical role as habitat for a variety of plants, wildlife and aquatic organisms such as fish, clams and crayfish. Many of the forested wetlands are located at the boundaries of high water along the coast or concentrated along tributaries or on floodplains of major river systems. When these forested wetlands occur locally on floodplains of major coastal river systems, tree species such as water oak, willow oak, sweet gum, and loblolly pine can be found (SC DNR 2005).

Forested wetlands are the dominant forest land cover type on the landscape, but these forest types are not homogeneous, rather they are found in a variety of hydrological conditions from riparian floodplains, the borders of high tidewaters and marshes and local ponds and depressions. Approximately



A sign marking the long-term research and recovery efforts post Hurricane Hugo in 1989.

95% of wetlands in the Carolinas are located within the coastal plain (Carolina Wetlands Association) with the majority as freshwater forested wetlands. These wetlands are at risk from conversion to urban development and agriculture or degradation from salt inundation and invasive species.

Salt inundation is a particular concern as sea-level rise encroaches into forested areas and more powerful storm surge pushes saltwater and salt spray further inland. Salt creates toxic conditions in the soil which leads to water stress for trees ill-adapted to high concentrations of salt, resulting in “ghost forests”, large swaths of dead standing and often bleached trees. With tree cover loss and higher water tables, marshes are able to migrate further inland eroding the extent of forest habitat. In addition, some invasive species such as phragmites colonize and form dense thatch which reduces native plant competition, decreases habitat quality and elevates wildfire risk to adjacent homes and properties.

Benefits to Water Resources in the Study Area at a Glance...

Coastal Forests in the study area capture and infiltrate 3.2 billion gallons of stormwater per 2 inch rain storm event

Pollution loading levels (Nonpoint sources) reduced pollutants such as nitrogen, phosphorus, sediment and reduced loadings to waterways by:

- 735,400 lbs per year of avoided nitrogen runoff
- 40,100 lbs per year of avoided phosphorous runoff
- 24,900 tons per year of avoided sediment runoff

Miles of streams that have a forested buffer = 764 miles or 73% of stream miles.

Miles of stream listed as impaired (section 303-d listed) = 5.5 miles or 0.5% of stream miles.

Of those 764 forested stream miles, 88% have at least a 100 ft buffer and 83% have at least a 600 ft buffer.

A 100 foot buffer removes the majority of N, P, S from overland runoff, while a 600 foot buffer is wide enough to also serve as a corridor for many species of wildlife.

Wetlands = 54,668 acres

Forested wetlands = 183,928 acres

Note that wetlands data are from the National Wetlands Inventory and overlaid with forest cover. Wetlands are difficult to pick out with aerial mapping when covered by dense canopy. The extent of forested wetlands in the study area may be far greater.



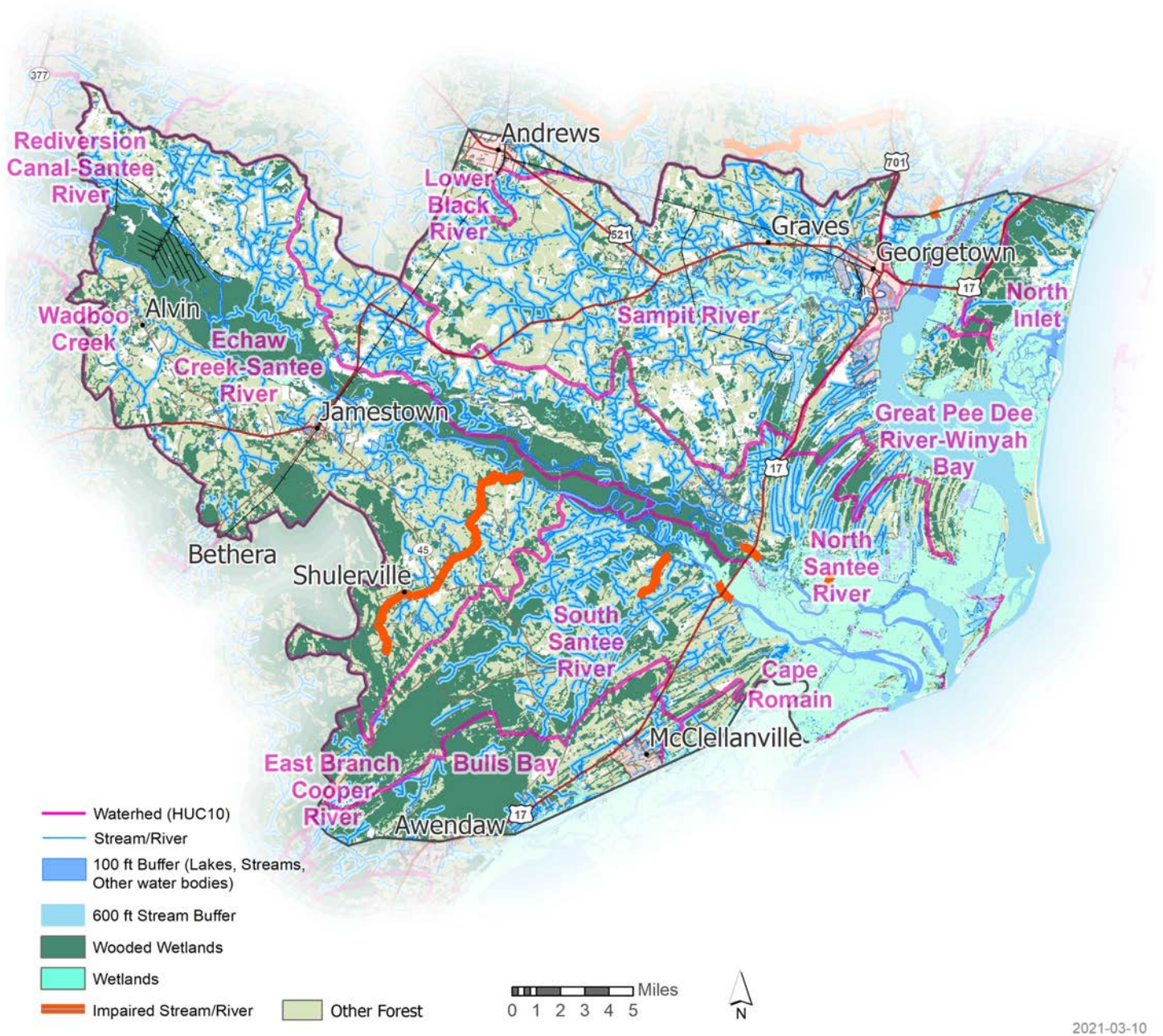


Figure-11: A map displaying the water resources within the project study area including 100 ft and 600 ft stream buffers, wooded wetlands, and non-forested wetlands. 100 ft forested buffers protect water quality and 600 ft forested buffers were mapped as possible wildlife corridors.

Benefits to Wildlife & Biodiversity

One of the biggest supporting services provided by coastal forests is the amount of habitat they provide to forest-dependent species. Forest-dwelling species, such as the red-cockaded woodpecker are dependent on large tracts of intact forests for habitat. Without protected forestlands, these species would be extirpated from the region. Forest cores and corridors also provide connectivity for wildlife across the landscape, which allow animals to migrate and adapt to immediate (fire) and long-term (climate change) threats. The South Carolina study area contains 361,987 acres of total forest cover; however, large intact tracts of forests (100+ acres in size) make up 252,798 acres or 70% of total forest cover.

Table-4: Number of acres of forest cores, by size class, in the study area.

Size Class	Count	Total Acres
100 – 500 acres	123	33,941
501 – 1000 acres	70	41,078
1000+ acres	81	177,779
Total	274	252,798

Source: Green Infrastructure Center’s intact cores model using NLCD 2016 data.



Red-cockaded Woodpecker

Photo credit: Lance Cpl. Matthew K. Hacker

Table-4 below shows the breakout of intact forest tracts by size and count within the study area. There are 274 intact forest tracts that are larger than 100 acres in size, and the acreage across class sizes is heavily favored for the largest sized cores (greater than 1000 acres in size) which make up 49% of total forest cover in the region. This means nearly half of the forest cover in the study area is made up of large blocks of intact forested habitat. These large forested tracts provide critical habitat for forest dependent species and pathways for forest species to migrate across the landscape

The coastal forests of South Carolina are rich in tree diversity, with over 100 species of trees making up the forests. There is a total of 364 species of terrestrial vertebrates within the study area. Birds are the most “species rich” of any of the groups, at 218 species (see Table-5).



A great egret perched in a coastal marsh.

Table-5: Species richness of terrestrial vertebrates, by taxonomic group.

Taxonomic Group	Species Richness
Amphibians	43
Birds	218
Mammals	44
Reptiles	59
Total	364

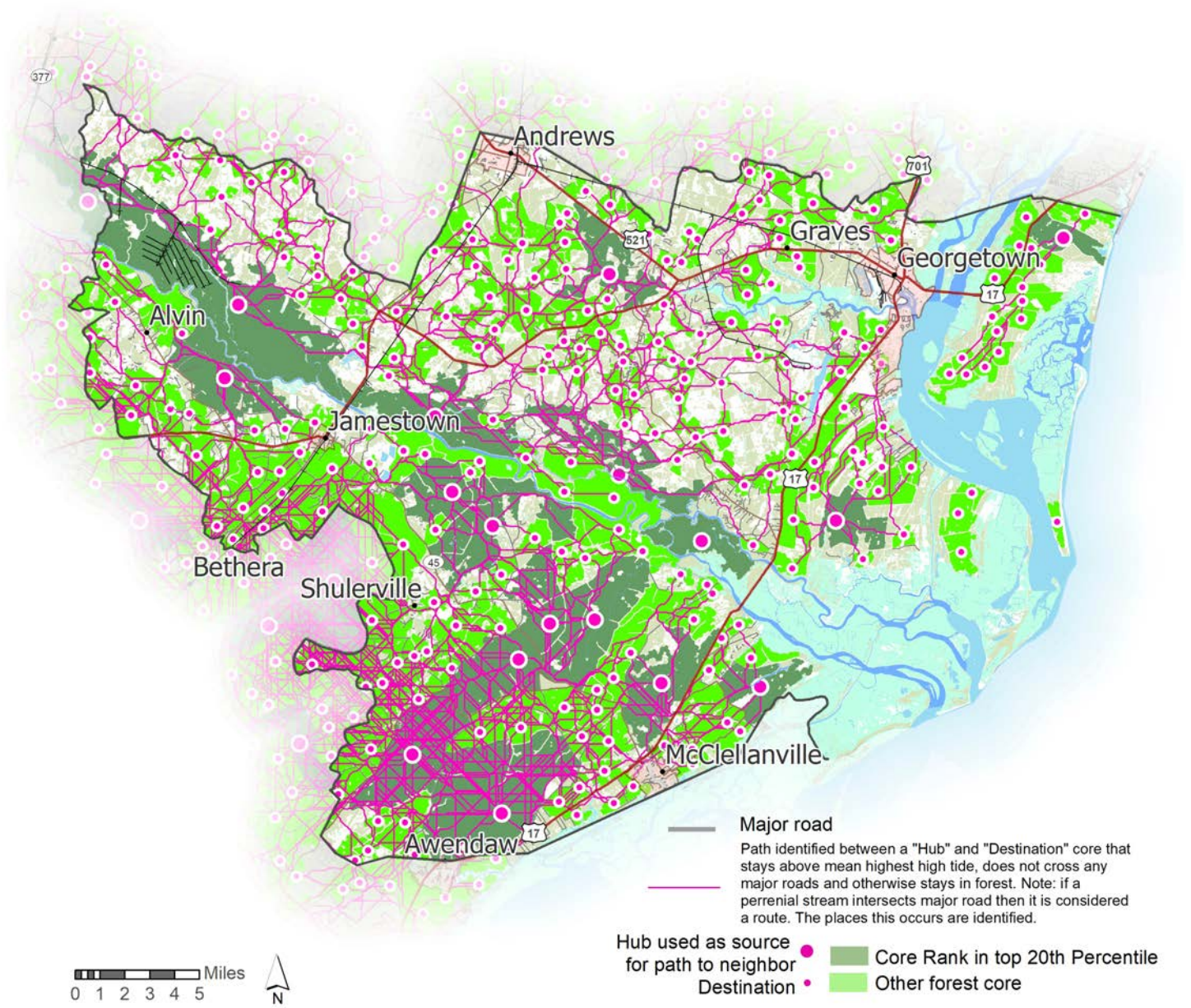
Source: Biodiversity Mapping.org

The region is also home to several federal- and state-listed threatened and endangered species (Table-6). Twenty-four species within the study area are either federally or state listed (or both) as endangered, threatened, at-risk or regulated. Several species, such as the Carolina gopher frog and the frosted flatwoods salamander are associated with vernal pools in pine savannas or flatwoods, while the Bachman’s sparrow and the wood stork, are found in mature, mixed-hardwood swamp forests and cypress stands. Coastal forests not only provide critical habitat for these rare species, but serve as refugia for hundreds of species that support the many ecosystem services and functions upon which communities rely.

Table-6: A list of federal- and state-threatened and endangered species within the study area. LT = Listed Threatened; LE = Listed Endangered; ARS = At-Risk Species; and R= Regulated.

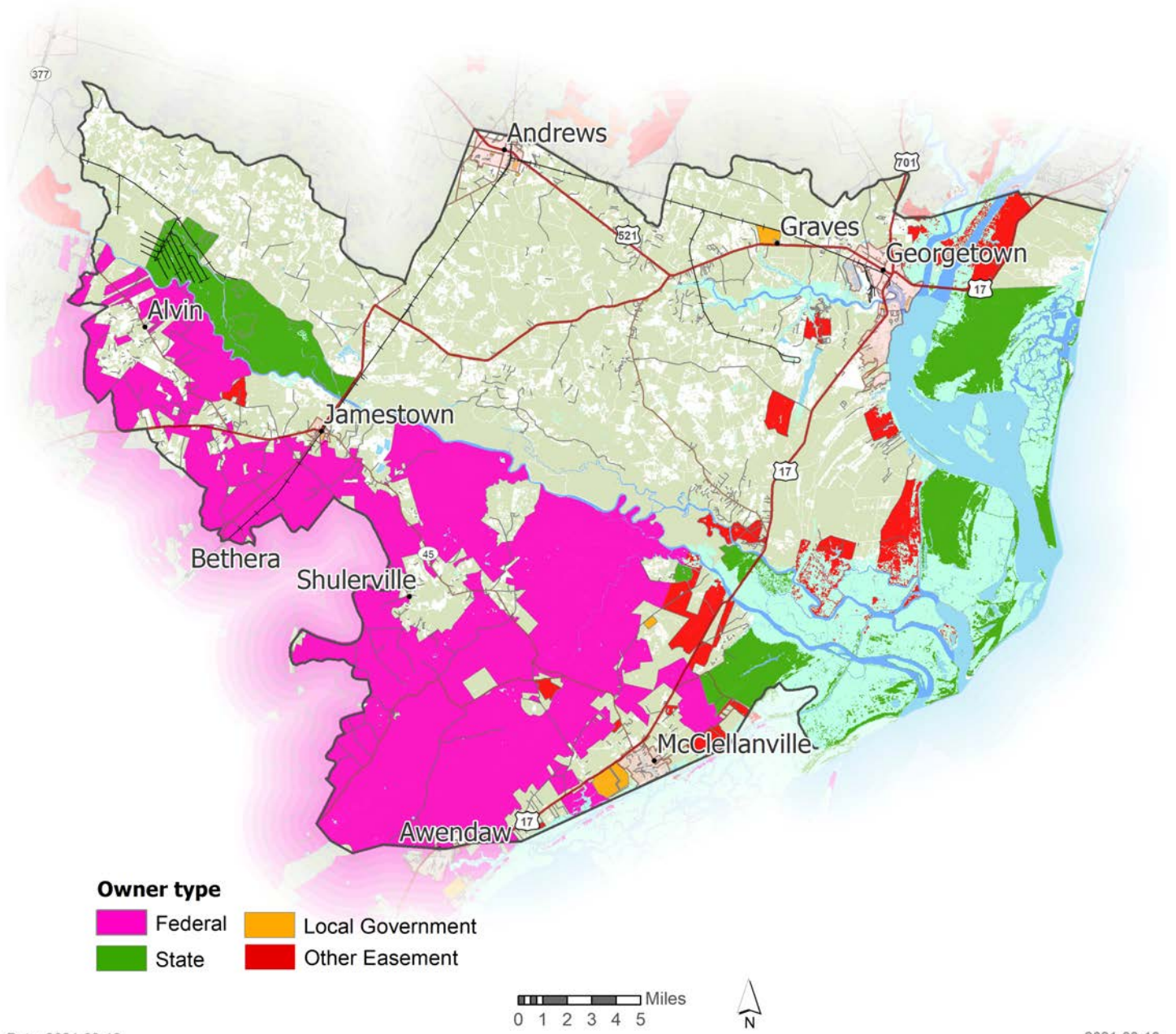
Common Name	Scientific Name	Taxonomic Group	Federal Listing	State Listing
Frosted Flatwoods Salamander	<i>Ambystoma cingulatum</i>	Amphibian	LT	LE
Wood Stork	<i>Mycteria americana</i>	Bird	LT	LE
Red-cockaded Woodpecker	<i>Picoides borealis</i>	Bird	LE	LE
Bachman’s Warbler	<i>Vermivora bachmanii</i>	Bird	LE	LE
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	Fish	LE	LE
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Mammal	LT	
Loggerhead Sea Turtle	<i>Caretta caretta</i>	Reptile	LT	LT
Seabeach Amaranth	<i>Amaranthus pumilus</i>	Vascular Plant	LT	
Canby’s Cowbane	<i>Tiedemannia canbyi</i>	Vascular Plant	LE	
Southern Spicebush	<i>Lindera melissifolia</i>	Vascular Plant	LE	
Chaffseed	<i>Schwalbea americana</i>	Vascular Plant	LE	
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>	Fish	LE	
West Indian Manatee	<i>Trichechus manatus</i>	Mammal	LT	LE
Black Rail	<i>Laterallus jamaicensis</i>	Bird	LT	
Chicken Turtle	<i>Deirochelys reticularia</i>	Reptile		R
Northern Dwarf Siren	<i>Pseudobranchius striatus</i>	Amphibian		LT
Carolina Gopher Frog	<i>Lithobates capito</i>	Amphibian	ARS	LE
Swallow-tailed Kite	<i>Elanoides forficatus</i>	Bird		LE
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Bird		LT
Wilson’s Plover	<i>Charadrius wilsonia</i>	Bird		LT
Least Tern	<i>Sterna antillarum</i>	Bird		LT
Rafinesque’s Big-eared Bat	<i>Corynorhinus rafinesquii</i>	Mammal		LE
Spotted Turtle	<i>Clemmys guttata</i>	Reptile	ARS	LT
Southern Hog-nosed Snake	<i>Heterodon simus</i>	Reptile	LT	LT

Source: South Carolina Natural Heritage Data



2021-03-10

Figure-12: A map showing forest corridors and connections across the study area.



Date: 2021-03-10

2021-03-10

Figure-13: A map showing protected lands by ownership status.

Benefits to Forest Economy

The forest sector contributes to regional and local economies through resource production, taxes, and direct jobs in the industry (lumber, milling) and indirectly through supporting jobs. Total economic output for South Carolina’s forest industry in 2018 was valued at over \$21 billion with 60% of that contribution coming from the pulp and paper industry (Adams et al 2019). The aggregated forest sector, which includes wood products such as pulp and paper, solid wood products, forest recreation, timber and logging employed either directly, indirectly or induced more than 98,306 people across the state (Adams et al 2019) (see Table-7).

The forest sector is dependent on the availability and abundance of forestland and the economies of scale for production, harvesting, and processing. As coastal forests are converted into non-forest uses, markets that rely on a steady supply of timber and non-timber products are jeopardized, along with those jobs and tax revenue streams upon which communities rely. For example, “every \$1000 spent on forest products made in the Palmetto State generates an additional \$520 in sales in rural communities” (Adams et al 2019).

Table-7: Annual Economic Contribution of Forestry to South Carolina’s Economy in 2018

Metric	Contributions			Total
	Direct	Indirect	Induced	
Employment (no. of jobs)	47,047	28,198	23,060	98,306
Labor Income (Million USD)	\$2,577.6	\$1,467.6	\$912.0	\$4,957.4
Value Added (Million USD)	4,898.5	2,288.0	1,678.7	\$8,865.2
Output (Million USD)	\$13,917.3	\$4,296.1	\$2,980.7	\$21,194.1

Source: South Carolina Forestry Commission, 2019



A truck transports logs to a local processing facility. The forest economy creates many direct and indirect jobs in rural communities.



The forest economy is dependent on available land for forests to regenerate and replace harvested trees.

Benefits to Recreation & Tourism

Recreation is a cultural and provisioning service coastal forest provide to communities. Recreation, in the form of hiking trails, greenways, lakes and rivers for fishing, hunting, birding, and more, brings valuable active pursuits to communities. South Carolinians top forest recreational activities in 2016 were hiking and wildlife watching with 35% of people participating in these activities (Adams et al 2019).

These outdoor enthusiasts also spend money in the local economy on products such as food, gas, and lodging. In fact, American consumers spend more money on outdoor recreation than on fuel and pharmaceuticals combined (OIA 2017). Nature-based outdoor recreation, which includes activities such as hiking, camping, and hunting, all of which take place in a natural setting, contributed \$2.36 billion to South Carolina's GDP in 2019 (BEA ORSA 2019). Forest recreation specifically contributed \$1.65 billion in total economic output for the state in 2018 (Adams et al 2019). Coastal forests and other natural amenities attract employers and employees alike, making the region desirable for businesses and workers to relocate and revitalize a local or regional economy. One study demonstrated a strong positive correlation between the growth of entrepreneurial and creative class industries and rural counties that ranked very high in outdoor amenities (McGranahan et al 2010).

Economic Value of Outdoor Recreation & Tourism Industry

For South Carolina 2019

Employment: **101,075** outdoor recreation jobs in all industries

Nature Based GDP: **\$2.36** Billion

Source: Bureau of Economic Analysis (BEA), Outdoor Recreation Satellite Account (ORSA), 2019



Trees frame the entrance to 8 Oaks Park and invite users inside.

Acres of protected areas: 222,074 acres or 42% of the study area.

- Federal: 122,853 acres
- State: 72,309 acres
- Local: 1,525 acres
- Conservation easements: 25,388 acres

Sources: PADUSA FEE, National Conservation Easement Database, Charleston County Greenbelt Program, Georgetown County Protected Areas, 2020



Trees provide shade along trails and encourage outdoor recreation and activity.



Figure-14: A map displaying the cultural and historical resources in the study area.

Benefits to Cultural Heritage

Number of historical and cultural sites in the study area

20 historical and cultural sites* are located in the study area.

*Source: *National Register of Historic Places, National Park Service*

17 of those sites are within 200 meters of a forest.

Landscape context is important for historic sites. Forested backdrops, large trees and scenic vistas are all provided by the landscape. As much of the study area contains significant federal, state and local historic assets, the landscape's role in adding to that setting cannot be underestimated. Forests form the cultural landscape for many of South Carolina's historic sites.

A cultural landscape is defined as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.” (National Park Service Preservation brief 36).

Conclusions

This report highlights the many environmental, economic, social and cultural benefits coastal forests provide to the Lower Santee River watershed and surrounding communities. This analysis will be used to inform the next stages of the Resilient Coastal Forests Project where local stakeholders and the public will evaluate coastal forest threats, their extent and discuss subsequent management strategies to protect, adapt and mitigate risks. The stakeholders will prioritize what forests are most important using the inventory and asset data and discuss ways to maintain forest integrity, connectivity on the landscape and maximize forest benefits into the future through



Trees can help mark historical places and events.



Trees can lend a backdrop to historic buildings and other cultural sites.

conservation management strategies. Knowing the benefits that coastal forests provide to the community helps local stakeholders build support for forestland conservation in urban, suburban and rural landscapes and to plan for a resilient future for South Carolina's trees.

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