

CHAPTER 3 – NATURAL RESOURCES

INTRODUCTION

This element of the Comprehensive Plan provides an inventory and assessment of natural resources and consideration of the role of these resources in the future development of Orangeburg, including how they impact the development of the City and how they can be expected to continue to affect the City in the future. Natural resources do not recognize political boundaries, and it is difficult to address natural resources in the City unless you expand the boundaries of the discussion to include the county and region in which it is located.

The first known European settler in Orangeburg was George Sterling, an Englishman who established a trading post on the North Fork of the Edisto River in 1720. At that time, the natural environment was much the same as when Native Americans first arrived in the area to take advantage of the natural resources in the coastal plain. Natural resources were critical to Native American culture and became essential to the development of the region as Europeans and Americans developed trails and established commercial trade creating roads, homesteads, farms, stores, railroads and a modern community of industry and services. The land, water, wildlife, climate, and soils provided natural resources for modern men and women to create and define the City of Orangeburg as an attractive and livable place for commerce, employment, education, and transportation.

3.1 CLIMATE

Orangeburg summers are generally considered hot and humid. Frequent exchanges of warm and cold fronts bring moist maritime air, summer showers, and thunderstorms. In the summer, the average temperature is 79 degrees and the average daily maximum temperature is 89 degrees. The highest temperature recorded in Orangeburg, 106 degrees F, occurred on August 6, 1954.

Winters in Orangeburg are moderately cold, but usually short. The Appalachian Mountains to the west and the Atlantic Ocean to the east help mitigate protect the area against many cold waves. The average winter temperature is 46 degrees F, and the average daily minimum temperature is 34 degrees. The lowest temperature on record in Orangeburg occurred on December 13, 1962, when the temperature dropped to 6 degrees F. The spring season begins early, but early morning frosts may occur into late April.

Precipitation is relatively evenly distributed throughout the year. The total annual precipitation is 47 inches. Of this, 28 inches, or 60 percent, usually falls in April through September. Snowfall is rare and when it does occur, it is usually of short duration and no more than two inches. The heaviest one-day snowfall on record was more than 20 inches.

The average relative humidity in mid-afternoon is about 50 percent. Humidity is higher at night. The average at dawn is about 85 percent. The sun shines 65 percent of the time possible in summer and 60 percent in winter. The prevailing wind is from the southeast. Average wind speed is highest in spring.

The climate is favorable to farming and was a major attractor to the settlement of Orangeburg and the Edisto River valley. Agriculture continues to be a major element of the regional landscape. Temperate climatic conditions are also cited as a factor in the accelerated growth of the southeastern United States (the Sunbelt), due to warmer and more hospitable temperatures than the northern states (especially in light of the advent of air-conditioning).

In late summer and throughout the fall (typically June through November), the Carolina coastal plain may experience tropical cyclonic storms that form in relatively warm air over the Atlantic Ocean or in the Caribbean Sea. These cyclonic storms start as a tropical low. If they develop a clearly defined circulation and wind speeds up to 39 miles per hour (MPH), they may be defined as a “tropical depression”. A storm with sustained higher wind speeds between 39 and 63 mph is designated a “tropical storm”, and if the storm attains sustained wind speeds greater than 63 mph, the storm is designated a “hurricane”. Significant damage can be created by any of these tropical cyclonic storms due to wind shear, tornado activity, and very heavy rains.

Major tropical storms and hurricanes in 1686, 1700, 1822, 1854, and 1893 are recognized from the historical records. Hazel (1954), Gracie (1959), and Hugo (1989) were large (category 3 and 4) hurricanes that did major damage throughout the South Carolina coast and Hurricane Floyd was a near miss in 1999. Tropical Storm Kyle (2002), Hurricane Gaston (2004), Hurricane Charley (2004), and Tropical Depression Bonnie (2016) also made landfall and caused significant damage in the state.

3.2 SOILS

This City of Orangeburg is located in “The Southern Coastal Plain” resources area which includes about 35 percent of the County, extending to Lake Marion. The soils are mostly well-drained or moderately well-drained, and consist of loamy or clay sediment. The elevation ranges from about 220 to 350 feet.

North of the City, about 11 percent of Orangeburg County is in “The Carolina and Georgia Sand Hills” resources area. The soils there are mostly well-drained and sandy.

Southeast of Orangeburg, the moderately well-drained to poorly drained soils were formed in loamy or clay sediment and are in “The Atlantic Coast Flatwoods” resources area. The North and South Forks of the Edisto River, Four Holes Swamp, and Lake Marion drain southeast towards the coast and provide a diversity of hunting and fishing activities.

The City of Orangeburg is built principally on Dothan, Neeses, Faceville, Orangeburg, and Ailey Soils. Most are suitable to development except for Dothan soils, which are characteristically wet and pose severe constraints to septic tank filter fields. They require community sewerage systems to overcome development constraints.

Much of the land bordering the west of the City is composed of Johnson and Lumbee soils, which underlie the Edisto and Caw Caw Swamps. These soils too are characteristically wet, but unlike the Dothan soils, are essentially unbuildable. As such they form a natural barrier to the extension of development immediately to the west of downtown Orangeburg.

Soil conditions and their constraints to development have been very important in defining the directions for the growth of the Orangeburg community. Site development has generally followed the path of least cost for construction of foundations and septic tanks, and primarily been towards the north and east of the City. The major constraints posed by existing soil conditions to the west and south have resulted in voluntary avoidance of poorly suited soils, and growth towards better suited soils. Regulatory prohibitions have been enacted to support the protection of investment.

Soil conditions will continue to influence and shape the urban community. From a land-planning standpoint, it is essential to identify and understand the location and characteristics of soils. Detailed data and maps identifying the location of various soils in the Orangeburg area are available in a Soil Survey of Orangeburg County, USDA, and SCS, dated June 1988.

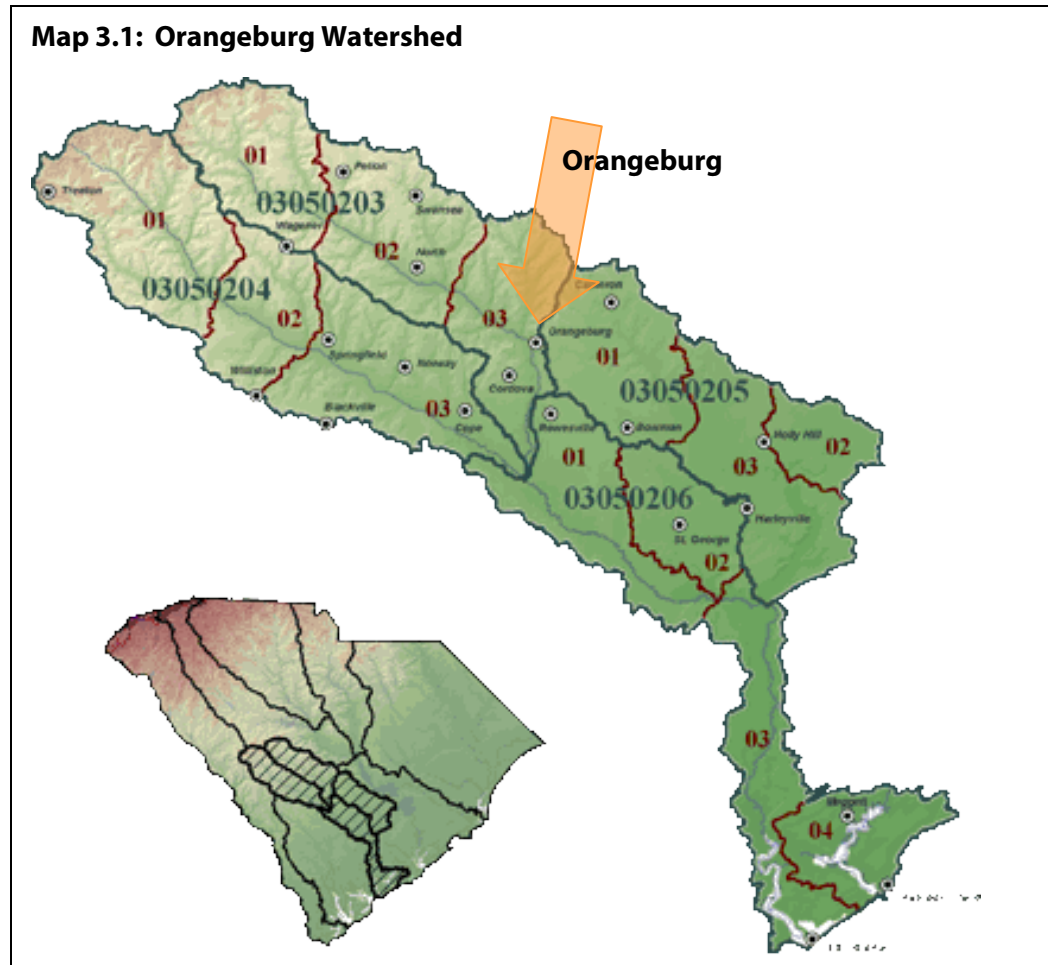
3.3 WATERSHEDS AND WATER SUPPLY

Water Supply Watersheds

A water supply watershed identifies the area where rainfall runoff drains into a river, stream or reservoir used as a source of public drinking water supply. Limiting the amount of pollution that gets into the water supply allows a local government to reduce the costs of purification and helps ensure safeguards for public health. The protection criteria for water supply watersheds vary depending on whether the watershed is large (>100 square miles) or small (<100 square miles).

The City of Orangeburg is located along the North Fork of the Edisto River shortly before it turns south to join the South Fork. ,Map 3.1 (to the right) illustrates the Edisto River Basin. Additional resources regarding South Carolina water basins is available at the SC DHEC website:

<http://www.scdhec.gov/HomeAndEnvironment/Water/Watersheds/WatershedMap/EdistoWatershed/>



The City of Orangeburg is within the North Fork of the Edisto River, which has been called the most recognizable and perhaps the most significant natural resource in the area. A Rivers Assessment Study was prepared by the South Carolina Department of Natural Resources for all of the rivers in South Carolina. The study evaluated each river in terms of its resource value, utility, and water quality. The North Fork of the Edisto River was found to be among the state's most pristine rivers (Class One).

The resource value of the North Fork of the Edisto River was assessed in terms of the following categories and assigned a value from one to four for each category.

Class One Value Category

Definition: Superior resource – rivers and river segments (and related corridors) with resource values that are of statewide or greater than statewide significance.

- ✧ **Wildlife Habitat River:** *river-related areas with furbearers, small mammals, endangered and habitat for migratory birds, resident birds, threatened species (federal and state), and non-game species of special concern.*
- ✧ **Recreational Boating River:** *flat waterboating and backcountry boating.*
- ✧ **Undeveloped River:** *undeveloped and free-flowing river segments.*
- ✧ **Inland Fisheries River:** *cold-water and warm-water fisheries, spawning, rearing and migration areas.*
- ✧ **Water Quality River:** *rivers with high water quality classifications presently attaining state standards.*

Class Two Value Category

Definition: Outstanding resources – river and river segments (and related corridors) with resource values that are of regional significance.

- ✧ **Natural Features River:** *endangered and threatened plants, unique plant communities and other recognized natural areas.*
- ✧ **Recreational Fishing River:** *prime recreational fishing rivers.*
- ✧ **Timber Management River:** *prime river-related timber areas.*
- ✧ **Water Supply River:** *significant drinking water supply rivers.*
- ✧ **Utility River:** *river-related utility sites.*

Class Three Value Category

Definition: Significant resources (rivers and river segments (and related corridors) with resource values that are of local significance.

- ✧ **Agricultural River:** *prime river-related farmlands.*
- ✧ **Industrial River:** *prime river-related industrial sites.*
- ✧ **Urban River:** *rivers flowing through urbanized areas, including urban recreation and urban river-related economic development.*

The resource value assessment by the state identifies that the North Fork of the Edisto River makes significant contributions to the community.

WETLANDS

The term “wetlands” identifies areas that are frequently inundated or saturated by surface or ground water sufficient to support vegetation typically adapted for life in saturated soil conditions. They generally include swamps, bogs, marshes, and similar areas. The principal criteria for determining wetlands are (1) hydrology, (2) soils, and (3) vegetation.

Wetlands are considered by state and federal governments to be important to the public interest, and are protected by state and federal laws. The federal Clean Water Act provides regulations to protect wetlands, and the South Carolina’s Department of Health and Environmental Control (DHEC) and the Army Corps of Engineers regulate activities that fill, remove, dredge, drain, or alter wetlands. The definition of a wetlands area requires a “jurisdictional determination” by the US Army Corps of Engineers to determine the limits of the defined area of a wetlands and address any potential impacts created by development proposals.

Wetlands provide many important benefits, including:

- ❑ *Flood Control* – Wetlands act as natural sponges, absorbing and gradually releasing water from rain to groundwater and streams.
- ❑ *Water Quality Improvement* – Wetlands act as natural filters and remove sediment, nutrients, and pollution from runoff.
- ❑ *Groundwater Recharge* – Water migrates downward through wetlands to maintain groundwater levels.
- ❑ *Recreation* – Many recreational activities take place in and around wetlands, such as hunting, fishing, hiking, bird watching, and photography.
- ❑ *Ecological Habitat* – Wetlands provide an important natural habitat for a many types of birds, fish, and a variety of other species.

The wetlands found in the Orangeburg community are large, forming the southern border of the City, paralleling both sides of the Edisto River and forming finger-like protrusions from the Edisto River into the urban fabric along Caw Caw Swamp and Turkey Hill Branch. The Little Bull Creek (parallel to I-26), and Middle Pen Creek (parallel to US 301 on the northern side), and Grambling Creek (between 301 and I-26) also include wetlands on both sides to the streams. In addition, small, isolated pockets of wetlands are scattered about the community. In summary, the areas of wetlands in Orangeburg are a significant element of the community’s natural resources, influence the City’s development patterns, and affect the City’s ambiance and lifestyle.

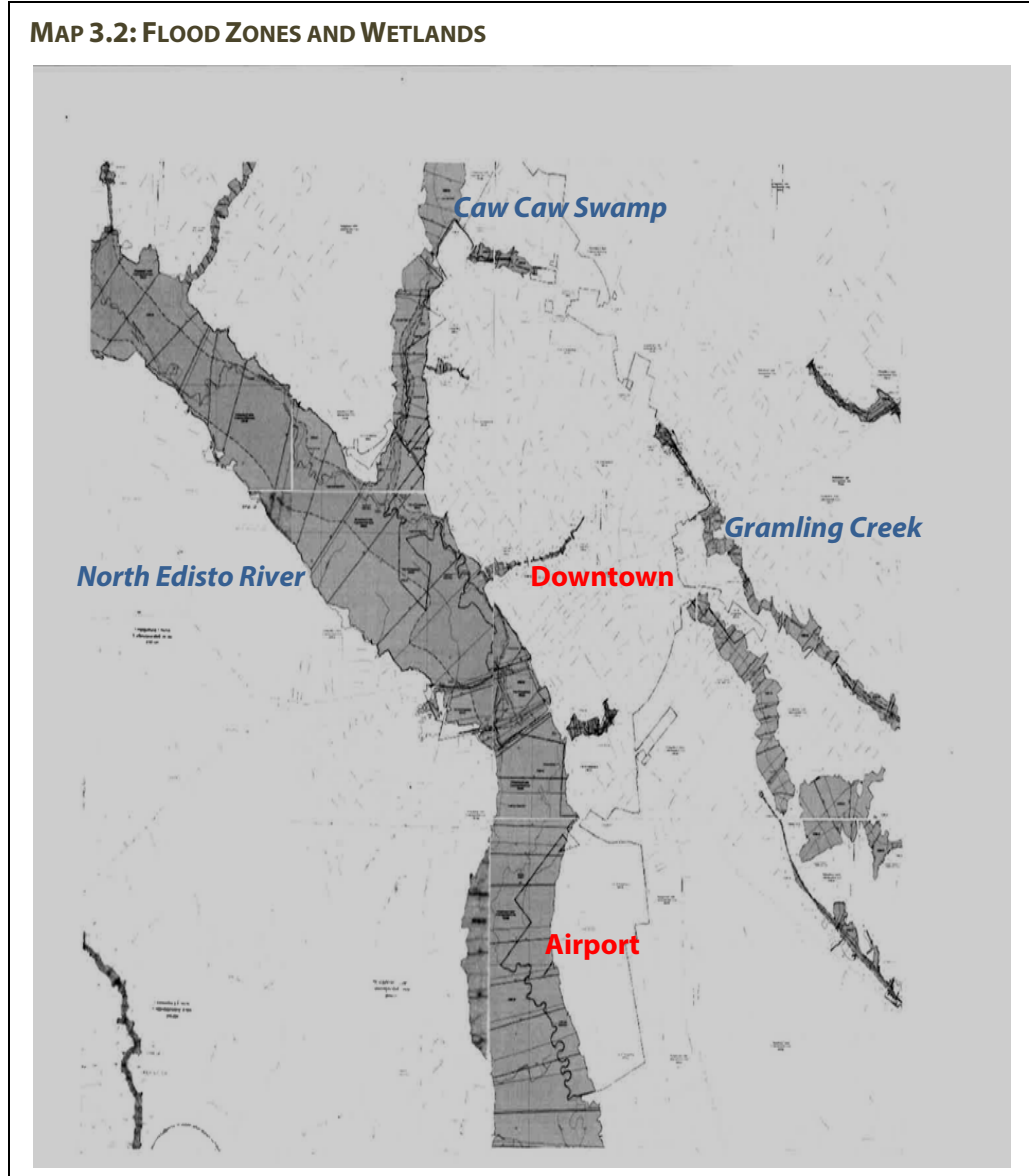
FLOODPLAINS

Small amounts of flooding occur frequently as thunderstorms or frontal showers may provide heavy rains in local areas or upstream of the City. The primary concern for a large flood is associated with a hurricane or tropical storm. A flooding event known as the 100-year flood is the maximum flood level expected to occur an average of once every 100 years (or a 1% chance of occurring in a given year). This is identified as the base flood elevation, which is the national standard on which floodplain management and insurance of the National Flood Insurance Program are based. The Federal Emergency Management Agency (FEMA) maintains flood maps, detailing the location of the following flood zones:

- ❑ **Zone A/AE** – Areas within the 100-year floodplain.
- ❑ **Zone B (or X-Shaded)** - Areas between the limits of the base flood and the 500-year flood.
- ❑ **Zone X** – Areas outside of the 100- and 500-year floodplain.

Development in areas zoned A/AE require flood insurance. It is important to keep development out of floodplains for the protection of life and property, but also for natural functions such as: natural water storage and conveyance, water quality and maintenance, and groundwater recharge. Additionally, floodplains and wetlands contain a variety of natural species and habitats that are unique to these types of ecosystems. Often these habitats are vulnerable to pollution, runoff, and other impacts from development within these areas.

Map 3.2 illustrates the generalized floodplain zones and wetland areas. Digital floodplain data for Orangeburg County was based on FEMA data. Floodplain maps are integrated into planning decisions upon approval. Building codes require that bottom floors of structures be elevated a minimum of one foot above the base flood elevation. It should be noted that this map is strictly for general planning decisions, and should not be used as an official guide for development or building permit decisions.



Source: FEMA Flood Map Service Center

Building codes require that bottom floors of structures be elevated a minimum of one foot above the base flood elevation.

BEST MANAGEMENT PRACTICES FOR WATER QUALITY

Best Management Practices (BMP's) are recommended practices for reducing runoff and other non-point source pollution that impact local water quality.

NATURAL TREATMENT TRAIN FOR STORMWATER

Floodplains provide an important role in nature's process system to reduce stream contaminants. The "Natural Treatment Train" practice uses natural elements such as vegetated floodplains, swales and marshland to serve as storm water filtration systems as an alternative to curb-and-gutter systems. The use of natural elements provides ecological bio-filtering of some potential contaminants, preservation of trees and existing habitat, water quality, and may create some cost benefits over traditional curb-and-gutter conveyance systems that expedite storm water flow (and any contaminants the water picks up) more directly into the surface streams and rivers. The Natural Treatment Train for Stormwater practice is encouraged by DHEC as a best practice for water quality management in urban areas to reduce impervious surfaces and storm water runoff.

RIPARIAN BUFFERS

Providing natural buffers around wetlands and streams helps protect water quality by leaving water flows undisturbed. Wetlands and streams are especially important in storm water filtration. Allowing storm water to naturally flow into and out of wetlands and streams helps maintain water quality and prevents toxic pollution of ecological marine habitats.

FRIENDS OF THE EDISTO RIVER

The North Fork of the Edisto River is an important element of what makes Orangeburg unique. It is the longest, free-flowing blackwater river in the US (310 miles) and the only one in South Carolina contained entirely within the State. The water has a dark tea color stained by tannins leached from tree leaves and other plant materials which decay in the surrounding swamps. The river basin contains productive farm and forest lands that contribute about 33% of the state's cash crops although comprising only 10% of the state's land area. The river provides numerous ecological community habitats and supports at least 87 freshwater and 120 saltwater fish species, including anadromous striped bass, American shad, shortnose sturgeon, Atlantic sturgeon, and American eel. Downstream, the Edisto is part of one of the most significant land conservation efforts in the eastern United States in the area known as the ACE Basin, a coastal wetland wilderness which lies at the mouth of the Edisto River.

Edisto Memorial Gardens is in the City of Orangeburg along the North Fork Edisto River. The gardens feature hundreds of species of roses, as well as wisteria, dogwoods, azaleas, and crape myrtle. The adjacent wetland park has a series of boardwalks through the riverside swamp. The Orangeburg Arts Center is adjacent to the gardens. The Edisto North Fork Blueway provides a 38-mile paddling corridor for experienced and

3.4 PLANT AND ANIMAL HABITATS

THREATENED OR ENDANGERED SPECIES

Specific locations of endangered and/or threatened species are not available to the public, in order to prevent poaching or disturbance of these species. However the U.S. Fish and Wildlife and the South Carolina Department of Natural Resources (DNR) provide county-by-county listings of these species to identify their presence and potential threats to their populations. The table on the following pages lists the threatened and endangered species for Orangeburg County, their preferred habitats, and the types of threats they are vulnerable to. The list is countywide, rather than specific to the city. Although the endangered and threatened species may not be found in the city, Orangeburg residents and decision-makers can have impacts on local populations and should be aware of these species within the region.

Species are listed with their federal, and where applicable, state status. Federal designations include:

- ❑ *Endangered Species* – any species in danger of extinction throughout all or a significant portion of its range.
- ❑ *Threatened Species* – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range;
- ❑ *BGEPA - Bald and Golden Eagle Protection Act-*
- ❑ *ARS* - Species that the FWS petitioned to list, a positive 90-day finding was issued, but Federal protections do not currently exist

There are four state designations:

- ❑ *Endangered*
- ❑ *Threatened*
- ❑ *Rare* – a species which may not be endangered or threatened, but which should be protected because of its rarity;
- ❑ *Unusual* – a species that has special or unique features that entitle it to special consideration to ensure its continued survival.

All South Carolina county lists can be found at the U.S. Fish and Wildlife Service website at: www.fws.gov/charleston/docs/county_lists.htm.

Table 3.3: Threatened & Endangered Species, Orangeburg County

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Amphibians				
Frosted flatwoods salamander (<i>Ambystoma cingulatum</i>)	T	E	Adults and sub adults are fossorial; found in open mesic pine/ wiregrass flatwoods dominated by longleaf or slash pine and maintained by frequent fire. During breeding period, which coincides with heavy rains from Oct. to Dec., move to isolated shallow, small depressions (forested with emergent vegetation) that dry completely on a cyclic basis (Larvae present in breeding ponds)	Habitat destruction as a result of agricultural and tree planting practices (e.g., clear-cutting, mechanical site preparation), fire suppression, and residential and commercial development. (January-April)

Gopher frog (Lithobates capito)	ARS	E	Natural savanna, flatwoods, sandhill communities, and scrublands, usually near ponds.	Critically imperiled - Loss of habitat and fire suppression. (Call survey: February-April Breeding: October-March)
Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Dwarf Siren (Pseudobranchius striatus)	-	T	Aquatic salamanders gilled throughout life. They feed on tiny invertebrates and live in shallow ditches, cypress swamps, and weed-choked ponds.	Imperiled - Habitat encroachment
Birds				
American wood stork (Mycteria Americana)	T	-	Primarily feed in fresh and brackish wetlands and nest in cypress or other wooded swamps	Decline due primarily to loss of suitable feeding habitat; other factors include loss of nesting habitat, prolonged drought/flooding, raccoon predation on nests, and human disturbance of rookeries. (Nesting season: February 15-September 1)
Bald Eagle (Haliaeetus leucocephalus)	BGEPA	T	Coastlines, rivers, large lakes or streams which provide adequate feeding grounds; typically nest in SC between late Oct. and late ay; tend to return year after year to the same nest tree	Imperiled - Human activities that can cause them to abandon nest, or to not properly incubate eggs, or care for young. (Nesting season: October 1-May 15)
Red-cockaded woodpecker (Picoides borealis)	E	E	Nest in mature pine with low understory vegetation (<1.5 m); Forage in pine and pine hardwood stands >30 years of age, preferably >10" dbh.	Imperiled - Reduction of older age pine stands and to encroachment of hardwood mid-story in older age pine stands due to fire suppression. (Nesting season: April 1-July 31)
Mammals				
Rafinesque's big-eared bat (Corynorhinus rafinesquii)	ARS	E	Found in mines, caves, large hollow trees, buildings, and bat towers	Imperiled - Habitat loss (Year round)
Tri-colored bat (Perimyotis subflavus)	ARS	-	Prefer edge habitats near areas of mixed agricultural use, where found to feed on large hatches of grain moths emerging from corn cribs. Cannot withstand freezing temperatures and are among the first bats to enter hibernation each fall and the last to emerge in spring. Found in mines and caves in the winter	Disturbance of habitat, noise disturbance, susceptibility to disease. (Year round)
Southeastern Bat (Myotis austroriparius)	-	R	Found in mines, caves, large hollow trees, buildings, and bat towers. They often hunt and feed over water. The feeding flights usually alternate with periods of rest, during which the bats hang to digest their catch.	Critically imperiled - Habitat loss

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Eastern Fox Squirrel (Sciurus niger)	-	R	Abundant in open forest stands with little understory vegetation; ideally in small stands of large trees interspersed with agricultural land.	Habitat loss, over-hunting.
Reptiles				
Eastern diamondback rattlesnake (Crotalus adamanteus)	ARS	-	Upland dry pine forest, pine and palmetto flatwoods , sandhills , and coastal maritime hammocks, longleaf pine/turkey oak habitats, grass-sedge marshes and swamp forest, cypress swamps, mesic hammocks, sandy mixed woodlands, xeric hammocks, and salt marshes . May use burrows made by gophers and gopher tortoises during the summer and winter.	Habitat loss (Most of the year/Peak: April-November)
Pine or Gopher Snake (Pituophis melanoleucus)	-	R	Flat and dry habitats with open canopies and are most common in sand hill and sandy pine barren habitats, and also found in stands of longleaf pine or turkey oak forest.	Vulnerable - Habitat alterations, including fire exclusion.
Fish				
American eel (Anguilla rostrata)	ARS	-	Bottom dwellers in fresh water and estuaries and only leave these habitats to enter the Atlantic Ocean to spawn. Temperature dependent: normally (17-20° C), but can be found between 13-25° C	Commercial fishing exploitation and construction of hydroelectric dams that interfere with migration. (March 1-May 30; October 1- December 15)
Atlantic sturgeon (Acipenser oxyrinchus)*	E	-	Occur in major river systems along the eastern seaboard	Habitat alterations from discharges, dredging, or disposal of material into rivers, or related development activities involving estuarine/riverine mudflats and marshes; commercial exploitation up until the 1950's
Blueback herring (Alosa aestivalis)	ARS	-	Lives in marine systems and spawns in deep, swift freshwater rivers with hard substrates, migrating to spawning grounds in spring. During spawning, eggs are deposited over the stream bottom, where they stick to gravel, stones, logs, or other objects. Juveniles spend three to seven months in fresh water, and then migrate to the ocean.	Drastic declines from loss of habitat due to construction of dams and other impediments to migration; habitat degradation; fishing; and increased predation by recovering striped bass populations.
Shortnose sturgeon* (Acipenser brevirostrum)	E	E	Occur in major river systems along the eastern seaboard	Vulnerable - Habitat alterations from discharges, dredging, or disposal of material into rivers, or related development activities involving estuarine/riverine mudflats and marshes; commercial exploitation up until the 1950's

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Invertebrates				
Savannah lilliput (Toxolasma pullus)	ARS	-	Small mussel with limited range of locations found in shallow water at the edges of streams, rivers, lakes, and backwaters.	Critically imperiled - Shallow water distributions are susceptible to off-road motor vehicle traffic, droughts and water draw-downs. (March 1-September 30)
Carolina Slabshell (Elliptio congaraea)	-	R	Mussel found in rivers and small streams, usually preferring sandy substrates	Vulnerable - Sensitive to channel modification, pollution, sedimentation, and low oxygen conditions,
Eastern Floater (Pyganodon cataracta)	-	NR	Mussel found in small streams, rivers, ponds, lakes, and marshes, usually in slow moving backwaters or standing water on fine sand, silt or muddy substrates.	Sensitive to channel modification, pollution, sedimentation, and low oxygen conditions,
Paper Pondshell Utterbackia imbecillis	-	-	Mussel found in rivers and streams, and may be found in temporary bodies of water that occasionally receive water from rivers during flood events.	Sensitive to channel modification, pollution, sedimentation, and low oxygen conditions,
Eastern Creekshell (Villosa delumbis)	-	NR	Mussel found resting on deep muddy flock, or in sand and boulder fields. It tends to stay close to the bank of streams and rivers, often among tree roots	Sensitive to channel modification, pollution, sedimentation, and low oxygen conditions. May be susceptible to bank erosion and the loss of a forested riparian zone.
Plants				
Boykin's lobelia (Lobelia boykinii)	ARS	R	Perennial herb found in cypress-black gum depression ponds, limesink depression ponds, Carolina Bays, wet pine savannas and flatwoods wet ditches	Vulnerable - Reduction of insect pollinators by pesticides, clearing, draining, and filling wetlands, lowering of water table by excess withdrawals for irrigation, fire suppression, and destruction of wetland transition zones by construction. (July/August)
Canby's dropwort (Oxypolis canbyi)	E	E	Found in pond-cypress savannahs in Carolina Bay formations dominated by grasses and sedges or ditches next to bays; prefer borders and shallows of cypress-pond pine ponds and sloughs	Imperiled - Loss or alteration of wetland habitats (Mid-July-September)
Carolina-birds-in-a-nest (Macbridea caroliniana)	ARS	R	Flowering plant in the mint family in swamp forests	Loss or alteration of wetland habitats July-November
Sandhills lily (Lilium pyrophilum)	ARS	R	Flowering plant almost exclusive to longleaf pine communities in sandhills and herb- and shrub-dominated slopes along streams and small depressions.	Human intervention and habitat loss. (Late July-August)
Incised Groovebur (Agrimonia incise)	-	R	Perennial herb member of rose family found in damp lowland pine savannah sandy soil.	Imperiled - Human intervention and habitat loss.

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Blue Maiden-cane (<i>Amphicarpum muehlenbergianum</i>)	-	R	Perennial grass grows in pine woods and savannas, as well as wetlands. It can grow in shallow pools and on shorelines.	Vulnerable and Imperiled - Human intervention and habitat loss.
Piedmont Three-awned Grass (<i>Aristida condensate</i>)	-	R	Perennial grass grows in sandhill and Carolina bay pine woods, savannas, and wetlands.	Imperiled - Due to human intervention and habitat loss.
Wagner's Spleenwort (<i>Asplenium heteroresiliens</i>)	-	R	Small perennial fern found on outcrops of marl (mix of clay, sand, and calcareous substrate that is soft and crumbly, usually containing shell fragments), on damp limestone ledges, and on tabby masonry (a mixture of sand, lime, and oyster shells).	Critically imperiled - Human intervention and habitat loss. Quarrying of the calcareous rocks on which it grows poses a "low-level" threat.
Black-stem Spleenwort (<i>Asplenium resiliens</i>)	-	R	Small perennial fern found at the base of cliffs or sinkholes on limestone or other alkaline rocks.	Critically imperiled - Human intervention and habitat loss.
Coastal-plain Water-hyssop (<i>Bacopa cyclophylla</i>)	-	R	Sandy margins of streams and ponds.	Critically imperiled - Human intervention, water pollution, and habitat loss.
Narrowleaf Sedge (<i>Carex amphibola</i>)	-	NR	Perennial densely tufted sedge commonly forming tussocks (hummocks) in moist woodlands, openings, and flood plains. Species handles wet to mesic moisture, grows in full sun if in wet conditions, and in partial sun to shade in wet-mesic to mesic areas.	Human intervention and habitat loss.
Widow Sedge (<i>Carex basiantha</i>)	-	R	Mesic to dry upland forests; most numerous in dry-mesic mixed-oak and oak-hickory forests.	Imperiled - Human intervention and habitat loss.
Cypress-knee Sedge (<i>Carex decomposita</i>)	-	R	Floodplain ponds and sinkholes, forested wetland swamps (on Bald cypress tree trunks and cypress knees at the waterline, and similar bases of Tupelo and Buttonbush), peaty mounds and tree hummocks.	Imperiled - Human intervention and habitat loss.
Meadow Sedge (<i>Carex granularis</i>)	-	R	Found in very wet soils in swamps and wet meadows and damp open woods and thickets.	Imperiled - Human intervention and habitat loss.
Southeastern Sneezeweed (<i>Helenium pinnatifidum</i>)	-	R	Perennial herb found in pine or cypress-dominated wet savannas, seepage slopes, bogs, boggy stream banks, white cedar swamps, and power line clearings through these habitats.	Imperiled - Human intervention and habitat loss.

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Sarvis Holly (Ilex amelanchier)	-	R	Rare holly found along blackwater rivers and adjacent floodplains and in clay-based Carolina bays.	Vulnerable - Human intervention and habitat loss.
River Bank Quillwort (Isoetes riparia)	-	R	Aquatic plant found along margins of fresh water and brackish pond margins, cobble shorelines of rivers, and shallow gravelly areas of lakes	Imperiled – Pollution, habitat loss, and human intervention.
Pondspice (Litsea aestivalis)	-	R	Shrub from the laurel family found at the edges of ponds, cypress swamps, and Carolina bays.	Vulnerable – Draining wetlands, fire suppression, and human intervention.(Early March-April)
Piedmont Water-milfoil (Myriophyllum laxum)	-	R	Perennial aquatic herb found in sandhill ponds, spring runs, limesink or spring-fed ponds, and clear, sand-bottomed creeks through white cedar forests.	Imperiled - Human intervention, pollution, draining ponds , invasive water plants, and habitat loss.(All Year)
Georgia Beargrass (Nolina Georgiana)	-	R	Xerophytic flowering plant found in dry turkey oak scrub and longleaf pine woods.	Vulnerable - Human intervention and habitat loss.
Pineland Plantain (Plantago sparsiflora)	-	R	Perennial found on low roadsides and savannas, including seasonally wet, mowed roadsides.	Imperiled - Human intervention and habitat loss.
Leafy Pondweed (Potamogeton foliosus)	-	NR	Aquatic plant growing in water bodies such as ponds, lakes, ditches, and slow-moving streams	Human intervention and habitat loss.
Bottom-land Post Oak (Quercus similis)	-	R	Dominant tree in savannas and forests adjacent to grasslands, including pure or mixed stands.	Critically imperiled - Human intervention and habitat loss.
Awned Meadowbeauty (Rhexia aristosa)	-	R	Found on edges of limesink ponds; wet, peaty sands around depression ponds with pond cypress and swamp tupelo.	Vulnerable - Human intervention and habitat loss. (July – September)
Piedmont Azalea (Rhododendron flammeum)	--	R	Deciduous shrub found in dry woods and stream bluffs at elevations less than 1500 feet.	Vulnerable - Human intervention and habitat loss.
Harper Beakrush (Rhynchospora harperi)	-	R	Perennial grass-like herb found on lower slopes of grassy, sunny hillside seeps, streamheads, and bogs	Critically imperiled - Human intervention and habitat loss.
Tracy Beakrush (Rhynchospora tracyi)	-	R	Perennial sedge found along rivers and streams and in wetlands and grassy areas.	Vulnerable - Human intervention and habitat loss.

Species	Federal Status	State Status	Habitat	Threats (Best period for survey)
Sharp-scale Bulrush (<i>Schoenoplectus erectus</i> ssp. <i>Raynalianii</i>)	-	NR	Bulrush plant found on wet shores of lakes, ponds, and streams	Human intervention and habitat loss.
Baldwin Nutrush (<i>Scleria baldwinii</i>)	-	R	Found along large stream margins with permanent wet, unconsolidated muck areas.	Imperiled - Human intervention and habitat loss.
Virginia Spiderwort (<i>Tradescantia virginiana</i>)	-	R	Perennial forb/herb that likes moist soils, including prairies, woodlands, meadows, hillsides, stream banks, and along road sides.	Critically imperiled - Human intervention and habitat loss.
Carolina Fluff Grass (<i>Tridens carolinianus</i>)	-	R	Perennial grass found on upland pine woods, sandhills, and fire-suppressed sandhills,	Critically imperiled - Human intervention and habitat loss.
Piedmont Bladderwort (<i>Utricularia olivacea</i>)	-	R	Very small, annual suspended aquatic carnivorous plant found in ponds, lakes and ditches.	Imperiled - Human intervention and habitat loss.

Source: US Fish and Wildlife Service: T = threatened, E = endangered, ARS = Species FWS petitioned to list and a positive 90-day finding was issued (no current Federal protections were identified), BGEPA = Federally protected under the Bald and Golden Eagle Protection Act; and South Carolina State Department of Natural Resources List of Rare, Threatened, and Endangered Species and Communities Known to Exist in Orangeburg County (June 2014): T = threatened, E = endangered, R = Rare (see ranking under threat), NR = Not Rated.

The South Carolina Department of Natural Resources also identified unique ecological communities that are significant to the State and known to occur in Orangeburg County. These include water bird colonies, Carolina bays, and limestone sinkholes, and the ecological communities listed below:

- ❖ Fagus grandifolia - quercus alba - (acer barbatum)/mixed herbs forest Atlantic Coastal Plain Mesic Mixed Hardwood Forest
- ❖ Fagus grandifolia - quercus nigra forest Coastal Plain Mesic Beech - Water Oak Forest
- ❖ Limestone sink community
- ❖ Pond cypress pond community
- ❖ Pond cypress savanna community
- ❖ Pond pine woodland community
- ❖ Quercus hemisphaerica - carya glabra - (fagus grandifolia) forest
- ❖ Small stream forest G5 S5 Swamp tupelo pond community
- ❖ Xeric sandhill scrub community

BIRD SANCTUARY

A section of the Orangeburg City Code establishes the city as a bird sanctuary where it is prohibited to trap, hunt, shoot, attempt to shoot, molest, or rob the nests of any species of bird or wild fowl. Additionally, tree preservation and riparian buffer regulations help prevent the destruction of bird habitat.

Trees

One of the most important natural resources in any community is its trees. Developers, particularly residential, generally avoid areas void of canopy. Trees in the urban environment serve to protect and enhance property values, control erosion, moderate climate extremes, provide screens and buffers, promote traffic safety and contribute to community ambiance and beautification. Orangeburg's trees serve no less a purpose.

The value of this resource is such that regulating and monitoring the care and cutting of trees is recommended as a means of protection and enhancement.

TREE PRESERVATION

Tree protection helps prevent a number of ill effects that clear-cutting of trees can create for a community. Removal of trees can lead to increased erosion from lack of root structures, which severely impacts water quality. A lack of trees also harms the air quality and reduces the amount of shade, which can lead to heat islands. Animals rely on trees, both for food and shelter. Additionally, trees add aesthetic value to a community, increasing the desirability and land values.

Significant trees are defined as any healthy trees eight (8) inches and greater in DBH (trunk diameter, measured at breast height). Removal of significant trees within the building and driveway footprint is permitted, but no more than 25 % of significant trees outside of the building footprint can be removed, except by order of the Zoning Administrator.

Orangeburg's tree protection standards are average to above average in protection compared to other local ordinances throughout the nation. The city's ordinance also allows some flexibility by accepting a tree replacement plan for sites that cannot reasonably meet the preservation requirement for significant trees. In these cases, the developer can pay into a city tree replacement bank to mitigate the removal of trees that cannot be replaced on site.

Additional emphasis on protecting native plant species and maintaining a similar diversity and composition of species that existed in the area pre-development could be considered to create stricter standards for native species than for other species or protect plants other than trees that hold importance to native plant diversity.

3.4 SUSTAINABILITY

Orangeburg is a leader in sustainability. Sustainability is an umbrella of principles that encourages decisions that improve quality of life without compromising the ability of future generations to enjoy the same quality of life. For natural resources, sustainability involves encourages wise consumption of the Earth’s limited resources, and promotes development that reduces negative impacts on the environment. This can be as simple as household recycling to as large and complex as designing and implementing an entire sustainable neighborhood. Sustainable practices utilize recycled building materials in new or rehab construction and emphasize construction of buildings that are energy efficient and where possible use alternative energy sources such as solar power. The use of rain gardens and natural bio-swales rather than curb and gutter systems for storm water management is another common sustainable practice that provides water quality management through existing natural features, while limiting engineering and infrastructure.

This section examines some of the sustainable programs and practices that are occurring in Change to Orangeburg:

Sustainability Programs and Organizations

THE SUSTAINABILITY INSTITUTE

The Sustainability Institute is a local non-profit organization that promotes and advances sustainable building practices throughout South Carolina. The Institute educates citizens and builders about green building practices through workshops, programs and other events. They also own the GreenHouse, a renovated home in Change to Orangeburg that was retrofitted with sustainable products, and currently serves as a demonstration model and teaching tool for green building practices. The Institute also serves as a community resource for sustainable practices.

LEED CERTIFICATION

LEED is the Leadership in Energy and Environmental Design Green Building Rating System™ and has been used as a benchmark for the design, construction and operation of high-performance green buildings.

EARTHCRAFT HOMES

The benchmark for green residential construction, the EarthCraft House™ is a U.S. Southeastern Regional program for evaluating green building practices in residential construction. EarthCraft homes are energy efficient and toxin-free, and they utilize renewable resources in their construction.

3.5 NATURAL RESOURCE GOALS AND POLICIES

A summary review of the City’s natural resources reveals that:

1. Climatic conditions contributed to the early development of the area as a farm community, and remain an asset to development in contrast to climatic conditions in northern states.
2. Wetlands paralleling the Edisto River and several smaller creeks provide a natural amenity in the way of linear greenways and natural habitat areas.
3. Trees constitute one of the City’s most important resources.
4. Except for wetlands, soils within the City generally are suited to development and few building constraints.

Goals

GOAL	POLICY	ACTION	STATUS
3.1: Improve Navigability of the North Fork of the Edisto River	<i>River is classified by the state as a Class One flat-water and back country Boating River but is hazardous and difficult to navigate in places due to fallen trees. Within the Horne Wetlands Park and most of the City, the river is maintained for boating, but beyond the City the river is more perilous to boat traffic.</i>	<i>City should bring pressure on the state to maintain the navigability of the river in the interest of more fully benefiting from its resource value.</i>	
3.2: Create an Atmosphere of Awareness and Importance of the Community’s Natural Resources	<i>3.2.1: The City and agencies involved in the promotion and development should periodically sponsor natural resource awareness campaigns.</i>		
	<i>3.2.2: Promote cooperation and responsibility to ensure the sustainability of such resources</i>		
3.3: Maintain Proper Functioning of Wetlands and Flood Plains.	<i>3.3.1: Prudently enforce the City’s Flood Hazard Ordinance, and carefully review and mitigate projects impacting wetlands.</i>		
3.4: Encourage better landscaping and tree preservation during development process.	<i>3.4.1: Strengthen zoning regulations.</i>		
	<i>3.4.2: Amend tree protection provision in zoning ordinance to protect trees.</i>		
	<i>3.4.3: Provide examples by developing city property with this goal in mind.</i>		

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CHAPTER 4 – CULTURAL AND HISTORIC RESOURCES

INTRODUCTION

Cultural and historic resources define what is unique about a community. Communities draw their identity from their social and cultural history, how they choose to preserve or discard that history, and how citizens interact with each other and the landscape that surrounds them. Places and facilities enlighten our sense of history and culture and establish important resources for the City to use in planning for the future.

4.1 LOCAL HISTORY

The City of Orangeburg was incorporated December 24, 1883. However, the pre-history of the community began much earlier, as Paleo-Indian humans with stone and bone tools moved into a cold land south of the great glaciers of ice approximately 14,500 years ago in search of the large and smaller animals they hunted to survive. New groups followed, constantly replacing or mingling with the earlier communities, evolving into the Cusabo, Cherokee, Catawba, and other Indian tribes that populated South Carolina prior to the beginning of recorded history in 1670 with the arrival of a group of settlers and establishment of Charles Towne and the Carolina colony.

Over the following years, Carolina hunters and traders advanced north along the many rivers leading into the American interior, and settlers fanned out along the Atlantic Coast and inland. The first European settler in the vicinity of present-day Orangeburg was named Henry Sterling. In 1704, he located a cabin at Lyons Creek and obtained a land grant, and is believed to have traded goods with the various Indian and a few hardy pioneers.

The Township Act of 1730 authorized the establishment of several townships in the interior of the South Carolina colony. One was the Edisto Township located along the “blackwater” Edisto River. Immigrants made their way along Indian trails to the Edisto in 1735 to establish a town on the north bank of the river. Many were German and Swiss farmers attracted to South Carolina by the promise of provisions for one year and that each family head would receive a lot and fifty acres for each member of the family. Additional settlers arrived in 1736 and a third group in 1737 brought along the Rev. John Ulrich Giessendanner to serve as pastor to the new Orangeburg community. Much of the early history of the district was maintained by Dr. Giessendanner, and by his nephew of the same name who continued his work until 1761. The Germans and Swiss soon began exporting corn, wheat, rice, hemp and cattle hides over the newly built “Charleston Road” or on barges down the Congaree River, and the new town attracted blacksmiths, carpenters, and other artisans soon afterwards.

The lengthy travel time and difficult roads to the colonial seat of government in Charleston made the people of Orangeburg grow self-sufficient as they had little choice but to rely on local resources for goods, services, and protection. Local rangers, justices of the peace, and support by the community militia maintained vigilance against Indian attacks and domestic problems. In 1768/9, the Royal Colony of South Carolina created new larger judicial districts including the Orangeburg District between the Savannah and Congaree Rivers. The smaller parishes and townships, including Orangeburg Township (as part of St. Matthews Parish) became subunits of the judicial district, later called counties.

The conflict between the “Tory” adherents of the British Crown and “Patriots” that favored the creation of a new republican form of government began with debates and hopes for accommodation regarding taxation and colonial rights. The debate quickly broke down in 1775 and escalated into a difficult civil war that lasted for seven years. South Carolina included major battles at Charleston, Camden, Cowpens, and nearby Eutaw Springs. After the revolution, the State of South Carolina redefined its organization of judicial districts in 1785, and again in 1791 and 1800.

Major changes came with Eli Whitney’s invention of the cotton gin in 1793 and the explosion of cotton as a cash crop soon thereafter. Farms raising tobacco, indigo, and other crops were quickly expanded into cotton plantations. Rails came to Orangeburg County in 1828 when a train depot was constructed in Branchville. The first branch of the railroad off the main rail line extended to , thus giving Branchville its name. The Branchville depot is known to be the oldest railroad junction in the world. Today, the old train depot is a railroad museum.

The cotton economy maintained and polarized the American question of slavery and was the major issue leading to the American Civil War which left devastation in Orangeburg County, the burning of homes, the courthouse, the jail, and cotton warehouses by the Union troops of William Sherman in 1865. As he marched with Sherman set up headquarters at the home of Judge Thomas Worth Glover on Whitman Street in downtown Orangeburg in February 1865.

The Orangeburg community struggled to rebuild out of the ruins left after the Civil War. Land could be purchased for less than one dollar per acre due to deflated prices. Cotton was scarce, so prices were inflated for those who could get the money to plant. Agriculture would slowly help rebuild stability in Orangeburg. South Carolina’s revised constitution under reconstruction reorganized the districts into counties and permitted residents to elect their own representatives to the state legislature for the first time although the Orangeburg County boundaries continued to change until 1908 with the creation of Calhoun County.

Clafin College was founded in 1869 to provide education to freedmen and prepare them for citizenship. The South Carolina Agricultural and Mechanical Institute was created within Clafin College in 1872 to comply with the 1862 Land Grant Act, and the first college class of Clafin was graduated in 1879. In 1881, Bell Telephone began service with 14 subscribers. One year later, the Orange Cotton Mill began operation and put over 100 people to work. The city was incorporated in 1883, built a water system in 1887, and established a street trolley in 1888. Electric power came in the 1890s, and the South Carolina legislature established the Colored Normal Industrial Agricultural and Mechanical College of South Carolina as a separate institution in 1896. The 15-foot tall bronze Fireman’s Statue was erected on the square in 1902.

In the mid-1920s, the Edisto Memorial Gardens began to develop with the planting of azaleas on five acres of land along the Edisto River. In 1927, Orangeburg built the City Hall, City Jail, police headquarters, and an auditorium, *The Carolinian*. The Orange County Courthouse was built in 1928. This was the actually the fifth courthouse and was built two blocks away. The old courthouse site was purchased by the City and turned into a park and renamed Memorial Plaza.

The 1930s brought the economically devastating impacts of the boll weevil on cotton farming and the Great Depression. However, the decade also brought the first major electric project in the nation to Orangeburg County with the creation of a hydroelectric dam that connected the Santee and Cooper Rivers to form Lakes Marion and Moultrie.

Orangeburg’s contributions during World War II included the creation of the Hawthorne School of Aeronautics to train US and French pilots, and the establishment of Jennings Field (now the Orangeburg Municipal Airport). After the war, large numbers of veterans returned to

expand existing farms, build and establish new businesses. Many veterans used the GI Bill to attend college and the State legislature gave large sums of money to build new dormitories and athletic facilities at the newly renamed (in 1954) South Carolina State College.

Orangeburg became a major location during the Civil Rights Movement of the 1960s, as SC State and Claflin students, faculty, and local residents participated in marches and rallies to oppose segregation. In February 1968, three young men were killed and 27 others wounded at the height of a protest to desegregate the All Star Bowling Alley when state police opened fire near the front of the campus. The event is commemorated by a memorial plaza at the site.

The Orangeburg-Calhoun Technical Education Center opened later in 1968, and expanded rapidly to provide technical and vocational education to local residents. The first South Carolina Festival of Roses was held in Orangeburg in 1972. Hillcrest Golf Club opened in 1973.

In 1992, South Carolina State College formally became South Carolina State University, and in 1993, the Downtown Orangeburg Revitalization Association (DORA) was founded to encourage the development, redevelopment, and improvement of downtown Orangeburg. *The Carolinian Auditorium*, renamed for former city administrator Robert Stevenson, was renovated in the late-1990s, and the Orangeburg County Community of Character program was created in 2000 as a collaborative effort by DORA, all of the cities, the County, *The Times and Democrat* newspaper, the Orangeburg Chamber of Commerce, and the Orangeburg County Development Commission (OCDC).

South Carolina State continued to grow replacing four older dormitories with the 771-bed Hugine Suites dormitory, the largest in South Carolina. In 2007, South Carolina State University hosted the first Democratic U.S. presidential candidate debate of the 2008 Presidential election campaign.

4.2 HISTORICAL PLACES AND DISTRICTS

Much of the City's unique charms and amenities are found in the historical buildings and places within the city. There are eight Historic Districts located within the City of Orangeburg with multiple properties located in the city and on the National Register. Seven of these historical districts were combined to form the "Historical Multiple Resource Area" nominated for and included on the National Register of Historic Places in 1985. The eighth was added in 1997.

A strong preservation community is committed to preserving cultural and historical resources, including the National Trust for Historic Preservation, the State of South Carolina Historic Preservation Office, the South Carolina Institute of Archeology and Anthropology, the Orangeburg County Historical Society, and the Orangeburgh German-Swiss Genealogical Society.

The Orangeburg County Historical Society is the primary caretaker of local history. The Society owns and operates the Alex Salley Archives, containing records, papers, and historical artifacts in the Salley Archives building located at the corner of Middleton and Bull Streets. Constructed in the 1960s, the Archives Building is staffed by volunteers on Tuesday mornings, Wednesdays, and the 1st Saturday of each month. Documentation includes genealogical files and information regarding government, schools, churches, families, businesses, and civic organizations from Orangeburg's past.

HISTORICAL BUILDINGS AND PLACES

Twenty-five (25) historical sites located within the City have been listed on the National Register of Historic Places. The inventory of historical places on the National Register includes 17 individual properties and eight historical districts with multiple properties. Listing a site

on the National Register recognizes the significance of the location and qualifies the owner(s) for certain federal tax benefits and assistance for preservation when funds are available. Designation also requires consideration of the impacts on the properties when they are affected by federal or federally assisted projects. The properties on the National Register are listed below:

Table 4.1: Historical Place	Location	Era Constructed and Notes	Year Added to List
Orangeburg County Jail (The Pink Palace)	44 St. John St.	1860 (Burned in 1865 / rebuilt, and addition built in 1922)	1973
Tingley Memorial Hall, Claflin University	College Avenue, Claflin University Campus	1908	1983
Dixie Library Building	Bull Street at Middleton Street	Circa. 1850, moved in 1912 and again in 1955	1985
F.H.W. Briggmann House	1156 Amelia Street	Circa 1855	1985
Enterprise Cotton Mills Building	Zeus Industrial Products, 501 Boulevard	1896-1897	1985
Major John Hammond Fordham House	415 Boulevard	1903	1985
Mt. Pisgah Baptist Church	310 Green Street	1903	1985
Orangeburg County Fair Main Exhibit Building	Magnolia Street	1911	1985
Williams Chapel A.M.E. Church	184 Glover Street	Circa 1915-1925	1985
Lowman Hall, S. C. State University	SCSU Campus	1917	1985
Hotel Eutaw	Russell St. at Centre St., Courthouse Square	1926-1927	1985
Hodge Hall, S. C. State University	SCSU Campus	1928	1985
Dukes Gym, S. C. State University	SCSU Campus	1931	1985
Amelia Street Historic District	Amelia Street between Treadwell & Summers Streets	1890-1929, district includes 15 residences.	1985
Claflin College Historic District	Claflin University campus (portion)	Circa 1898-1917, district includes 5 education buildings and Tingley Memorial Hall	1985

East Russell Street Area Historic District	Sections of East Russell St. between Watson & Clarendon Streets and along portions of Oakland Place, Dickson & Whitman Street	Circa 1850-1930, district includes approximately 55 resources including a collection of one and two story houses.	1985
Ellis Avenue Historic District	Portion of Ellis Ave. between Summers Ave. and Wilson Street.	“Turn-of-the-Century” residences, and Ellis Avenue School (built 1931); District contains seven one and two story residential buildings.	1985
Orangeburg Downtown Historic District	General area around the public square	Circa 1850-1935, district includes collection of 44 buildings and one statue, including a livery stable, two churches, a post office, two lodge halls, city offices, and brick paved street. City’s first textile mill was lost a decade ago. Includes old Fire Station	1985
Treadwell Street Historic District	Along portions of Treadwell and Amelia Streets.	Circa 1890-1930. District contains approximately 40 period buildings, all but one were originally residences.	1985
Whitman Street Area Historic District	Along sections of Whitman, Elliott and East Russell Streets	Circa 1880-1925. District contains 12 period buildings, plus Judge Glover House (525 Whitman), built circa 1846, but substantially altered.	1985
Trinity Methodist Episcopal Church	185 Boulevard	1928-1944	1994
William P. Stroman House	1017 North Boulevard	Circa 1920s	1996
All Star Bowling Alley	559 East Russell Street	Early 1960s, associated with the 1968 “Orangeburg Massacre” incident important to the Civil Rights movement	1996
Orangeburg City Cemetery	Corner of Bull Street and Windsor Street	Established 1889	1996
South Carolina State College Historic District	300 College Street	Circa 1917-1969, includes 14 structures / excludes Dukes Gymnasium (listed separately) and student center	1997

In addition, the plan should recognize that additional historic resources on the National Register are located outside, but near to the city. The inventory of historical places on the National Register includes 17 individual properties and eight historical districts with multiple properties.

Listing a site on the National Register recognizes the significance of the location and qualifies the owner(s) for certain federal tax benefits and assistance

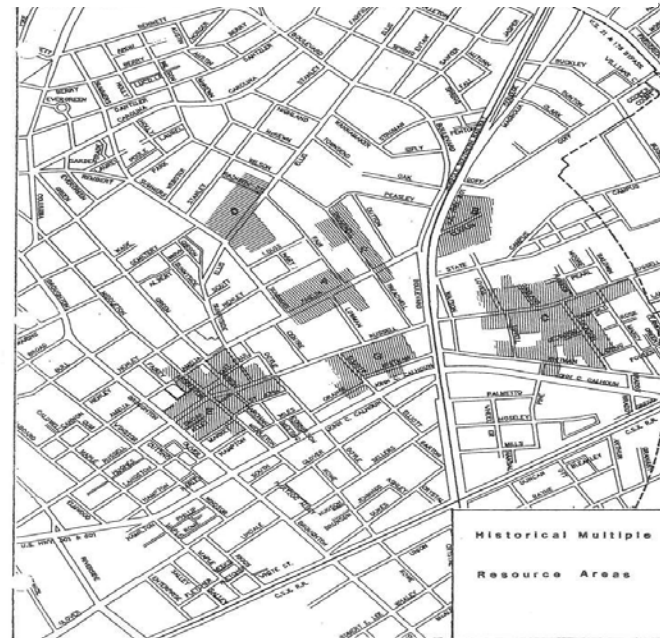
Table 4.2: Additional NR sites Located Outside the City	Location	Era Constructed and Notes	Year Added to List
White House United Methodist Church	US 301 (10 miles north of the city near the I-26 interchange)	Circa 1850	1974
Donald Bruce House	US 301 (2 miles north of the city limits, 1.4 miles from 178 Bypass)	Pre-1776 (moved between 1837-1857 to Middlepen Plantation, moved again (100 yards) in 1937)	1978
Alan Mack Site	Location information is restricted	Prehistoric archeological site	1986
Great Branch Teacherage	2890 Neeses Highway	1924-1925	2007

Note: Walking Tour sites should be added within the notes column

The Historical Multiple Resource Area is illustrated on Map 4.1. There are 191 resources of historical or architectural significance in the Historical Multiple Resource Area. However, many of these resources are located in areas undergoing physical change or transitions in how the buildings and land may be used, and the City’s historical resources may be vulnerable to compromise, misuse, destruction, structural alteration, and environmental change.

The historical, architectural, or aesthetic character of the historical resource may be affected by changes to the resource, to use, access/ egress, or surrounding buildings and grounds that alter the setting. Historical resource and review requirements for compatibility or assurance of restoration standards may be needed to consider when the potential reuse or modifications are acceptable to the community as well as the owners, and if some alterations of the proposed changes may be desirable to preserve the resource for future generations and still meet the owner’s requirements.

MAP 4.1: LOCAL HISTORIC DISTRICTS



HISTORIC ZONING OVERLAY DISTRICT

Historic overlay zoning districts are intended to help protect and support the city's historic resources.

A "Historical Conservation Overlay Zone" was added to the City's zoning ordinance in 1993 to enhance and ensure the survival of its historical resources. However, the Overlay Zoning District has not been applied on the Zoning Map, and it should be added during the next update of the Zoning Map.

OTHER HISTORIC STRUCTURES AND PROPERTIES

In addition to the historic properties mentioned in the discussion of National Register of Historic Places above, the city has significant history and several neighborhoods contain historic homes and properties. The Orangeburg Downtown Walking Tour identifies 29 specific resources, many within the Historical Multiple Resources Area. Some of the more significant examples in the historical include:

- **The Pioneer Graveyard** on Bull Street, the burial site for many early citizens of Orangeburg Township prior to the establishment of church cemeteries. The first church was in the vicinity of the site.
- **The Judge Glover House** on Whitman Street built in 1846 and serving as General William Sherman's headquarters as he marched across the state in February 1865, is included within the Whitman Street Historical District.
- **The Dukes-Harley Funeral Home** at 1580 Russell Street was built in 1904 and occupied by the business in 1936 until an unfortunate fire gutted the building in 1999. The rebuilt family home at the site does not meet requirements for historical preservation.
- **The Orangeburg County Courthouse** was built between 1927 and 1929 at the former site of the Trinity United Methodist Church. It is the fifth courthouse built by the county. The first was burnt by the British in 1781 and the third by Union troops in 1865. The site of the third and fourth courthouses is now the downtown square at Memorial Plaza.
- **The Orangeburg Church of the Redeemer** was built in 1857 and survived the Civil War and a move from Boulevard to Russell Street. The church features a classic gothic interior and signed Tiffany stained glass window.

The Edisto Memorial Gardens on Highway 301 includes a marker relating the story of the defense on the Edisto River Bridge in 1865. A five acre plot nearby was planted with azaleas in the early 1920s and a city playground was built nearby in 1922. A greenhouse and a nursery facility were added in 1947, and a rose garden was planted in 1951. The Fountain was moved to the Gardens from the Square in 1950 in memory of local military veterans who died in war. The gardens now cover 110 acres of azaleas, roses, camellias, and other flowering plants among the giant oaks, cypress, and other native trees along the Edisto River. Other local resources in and close to the City include:

- The Hawthorne School of Aeronautics is featured in exhibits at the Orangeburg Municipal Airport that describe the facility responsible for training nearly 6,000 American and French pilots during World War II. The Methodist Oaks retirement community is located at the site of the school buildings, and the airfield got its start as Jennings Auxiliary Field.
- The Orangeburg National Fish Hatchery was created in 1911 to support the conservation, protection, and enhancement of endangered and recreational fish species. The hatchery's main station is located at 427 Lakeview Drive off the Highway 21 By Pass,

and includes the offices, educational aquarium center, outdoor recreation and education area, and indoor and outdoor fish production facilities. Visiting hours are 8:00 am to 3:30pm Monday through Friday.

- Zion Church is located on US Highway 301, five miles south of the city. The church was built before the Civil War and replaced in the 1880s.

POTENTIAL SURVEY RECOMMENDATIONS

- ❑ Further Research & Investigation: Gaps in information, including areas in the city that have not been surveyed.
- ❑ National Register – Additional properties identified as eligible and still in existence...
- ❑ Interagency Cooperation – Coordination with the County to identify properties in the adjacent unincorporated areas....
- ❑ Public Policy – Effects of development and land uses on historic properties and preservation of significant view sheds when forming policies and decisions.
- ❑ Historic District Designation –Neighborhoods worthy of local historic district designation...
- ❑ Heritage Tourism –Opportunities to promote tourism opportunities to explore and educate groups and the general public and assist the development of the city as a destination and validate local pride in the City’s identity and history.
- ❑ Historic Markers – Historical markers as visual signage aids and identification of significant areas, including important historic properties that are no longer in existence.
- ❑ Adaptive Reuse of older buildings - A classic example is the conversion of old factories and warehouses into residential lofts, restaurants, or art studios. Another is reuse of shopping centers and their parking lots for residential infill development.

The South Carolina National Heritage Corridor passes through Orangeburg County as it traverses the State from the Mountains in Oconee County to the low country plantations and Charleston. Designated by the US Congress in 1996, the SCNHC is intended to preserve historic resources, educate residents and visitors, facilitate cultural tourism, and define programs and projects that can achieve economic benefits from increased tourism. The SCNHC has provided National Park Service grant resources for numerous historical and natural resource preservation projects along the corridor, including Trinity Community Church, the I.P Stanback Museum and Planetarium, the Chamber of Commerce, Edisto Memorial Gardens, and the Arthur Rose Museum at Claflin University. The SCNHC program is strongly supported and promoted by the South Carolina Traveler magazine.

4.3 CULTURAL ARTS AND ENTERTAINMENT VENUES

The City of Orangeburg provides a focal point for the expression of local and regional culture, the arts, and social activities. As the county seat and the center of the County’s social life, many cultural resources have been established within or near to the City, including government and commercial centers, churches, schools, and locations for entertainment and recreation.

The Orangeburg County Fine Arts Center, located just outside the Edisto Memorial Gardens in the old River Pavilion is home to the performing arts, visual arts and literary arts. A terrace garden overlooks the river. Exhibits located in the 2nd floor gallery feature local and regional art, pottery, needlework, miniatures, and other presentations. The Fine Arts Center also supports local arts organizations and schools through sub-grants, and “arts and education” programs through the center’s broad range of activities, workshops, exhibits, seminars, plays, concerts, arts and crafts, performances, luncheons, and tours. The Arts Center facility is owned by the City and leased to the Arts Council, a chartered non-profit organization founded to provide facilities for the enjoyment and participation of individuals in the Arts and Historical Heritage. The two-story building is adequate for most functions. Last renovated in 1984, it is being renovated in 2017-2018.

In addition to the Fine Arts Center, a local performing group, the **Orangeburg Part-Time Players**, secured and renovated the old Edisto Theatre downtown (renamed **Blue Bird Theatre**) for live performances.

Stevenson Auditorium is located in the City office complex on Middleton Street in downtown Orangeburg. Built in 1927, this complex was designed to serve as the cultural and administrative center of town. The auditorium has seating for 613, following major renovation in 2000, and inclusion of handicapped accessible modifications designed to meet ADA requirements. It is used about 200 days out of the year.

The auditorium serves as a catalyst for economic development of the downtown area and enrichment of the arts.

The Edisto Memorial Gardens provide 110 acres of flowering plants and trees on the Edisto River. Centennial Park, the Azalea Garden, and the Rose Garden pond area are frequently rented for weddings and receptions. Other sites throughout the gardens, such as the Sensory Garden, may be rented and used as well. The Chapel of Hope provides a small non-denominational structure for intimate events of a solemn nature. The Spray Park provides an active water recreation area with regular hours and opens throughout each summer. Private rentals are booked after regular business hours.

The Horne Wetlands Park is a major addition to the gardens located between the rose garden and the river. The wetlands park boardwalk is one element that is part of the City’s on-going 10-Year development plan for the Edisto Memorial Gardens. The plan includes 2,500 feet of boardwalks, observation decks, a boat dock, and an interpretative shelter to allow wildlife and plants to be viewed in their native settings.

INSTITUTIONAL VENUES

Major institutions affect everyday life for most residents of the community. Education and religious institutions provide facilities that may also support cultural activities in addition to their primary use by providing meeting rooms, event venues, and even some sponsorships for participants.

South Carolina State University adds considerably to the inventory of cultural facilities and resources available to the Community. Among these are:

- ✧ **The Martin Luther King Auditorium** is the largest cultural auditorium facility in the City with seating capacity for 1,000.
- ✧ **The Henderson-Davis Theatre** is located in Turner Hall and provides a seating capacity for 400.

- ✧ **The Fine Arts Building** houses the Barbara A. Vaughn Recital Hall and the FAB gallery exhibition space used for professional and student exhibitions. Visual Arts program studios are located on the 1st and 2nd floors. The Arts Center also includes a picnic shelter and a River Stage.
- ✧ **The Oliver C. Dawson Stadium** is a 22,000-seat multi-purpose stadium located on the SC State University campus. Opened in 1955, the stadium received major renovations in 1994, and is home to the South Carolina State Bulldogs college football team and the women's college soccer team. The stadium took its current name in 1984, named after former athletic director Oliver C. Dawson (1910–1989), an inductee of the South Carolina Athletic Hall of Fame.

These facilities are available for community use and present a variety of performances including concerts, plays, lectures, poetry reading, etc. The University also has a symphony orchestra, concert choir, gospel choir and the Henderson-Davis Players, among other performing groups, including the South Carolina State University Marching 101 Band.

South Carolina State University, Claflin University and Orangeburg-Calhoun Technical College have banded together to form a Community for Higher Education Council (CHEC). The mission of the Council is to expand the overall educational experience at each institution as well as affect quality of life improvements to the community as a whole. The CHEC publishes a Cultural Calendar of events sponsored by each institution as well as the Orangeburg County Fine Arts Center.

Claflin University adds to the list of cultural facilities and resources available to the community. The 800-seat capacity **W.V. Middleton Fine Arts Center** hosts nationally known artist and performances in addition to supporting local talent events.

Claflin University has its own television and radio studio, used for such programs as Teen Talk and local programming by Time Warner Studios. A Living and Learning Center has been added featuring a **Performing Arts Center**. This facility is used to accommodate smaller performing groups and audiences of about 150 people, and is housed in a renovated historical building.

Orangeburg-Calhoun Technical College (OCtech) opened in 1968 and has over 2,700 students as of May 2017. Located at 3250 Saint Matthews Road, the OCtech mission is to provide relevant training and education in a flexible environment that promotes success and self-reliance for students, and fosters economic development for the region. The multiple buildings on campus include the 37,000-SF Student Life and Community Center, completed in 2003 which features public meeting rooms, the Tourville Learning Lab, a Cyber Café, and offices for student services, the administration, and the president. The recently completed Gressette Building houses the library, student lounge, campus bookstore and academic offices.

PUBLIC SCHOOL RESOURCES

Two of the three Orangeburg County School Districts serve the City of Orangeburg. Orangeburg County School District Five is the largest public school district in the County and includes most of the City and areas to the north, east, and southeast. Orangeburg County School District Four includes the Edisto community and portions of the County to the west and northwest of the City. School facilities provide buildings and recreation facilities for the public education system. In addition, some school facilities also may be used to hold public meetings or support community needs, such as community meetings, emergency resource centers, or additional recreation facilities (three schools currently provide part time access to their gyms through the City of Orangeburg Parks and Recreation Department). These facilities provide

valuable cultural resources, and are listed below. A more complete inventory of school facilities is provided in the Community Facilities element.

<u>OCSD5 School Facilities:</u>	<u>Location</u>	<u>Potential Asset</u>
Orangeburg-Wilkinson High School	601 Bruin Parkway	
Bethune-Bowman Middle High School	4857 Charleston Highway, Rowesville, SC	
Orangeburg High School for Health	770 Stilton Road	
Orangeburg District 5 Technology Center	3720 Magnolia Street	
Robert E. Howard Middle School	1255 Belleville Road	Basketball Gymnasium (coordinates w/OP&R)
William Clark Middle School	919 Bennett Street	Basketball Gymnasium (coordinates w/OP&R)
Bethune-Bowman Elementary School	4857 Charleston Highway, Rowesville, SC	
Brookdale Elementary	394 Brookdale Drive	Basketball Gymnasium (coordinates w/OP&R)
Felton Laboratory School	300 College Avenue	
Marshall Elementary	1441 Marshall Street	
Mellichamp Elementary	350 Murray Road	
Nix Elementary School	770 Stilton Road	
Rivelon Elementary	350 Thomas B. Ecklund Circle	
Sheridan Elementary	1139 Hillsboro Road	
Whittaker Elementary,	790 Whittaker Parkway (Wilkinson Heights)	
<u>OCSD4 School Facilities</u>	<u>Location</u>	<u>Potential Asset</u>
Edisto High School	500 R M Foster Road, Cordova, SC	
Carver-Edisto Middle School	2018 Carver School Road, Cope, SC	
Edisto Elementary	136 Woodolive Lane	
Edisto Primary	3239 Cordova Road, Cordova, SC	
Star Center for Learning	6064 Slab Landing Road, Cope, SC	

PRIVATE SCHOOL RESOURCES

The private schools in the Orangeburg area also provide cultural resources to the community including meeting space and recreational entertainment venues. Albeit they may be closed to the public, they may impact surrounding properties when events occur. The inventory of private schools includes the following campus resources:

<u>Private School Facilities:</u>	<u>Location</u>	<u>Potential Asset</u>
Garden City Preparatory School for Boys	908 Willington Road	
Orangeburg Preparatory Schools	2651 North Road	
Wesley Christian School	492 Broughton Street	
Vanard Mendinghall Jr. Academy	1204 Decatur Street, NE	

LIBRARIES

The Orangeburg Branch of the Orangeburg County Library System is located at 510 Louis Street, and serves as a community center offering a variety of programs for children and adults including storytelling and art for pre-school youth, tutoring and language classes, writing workshops, and yoga. The library branch operates six days a week (Monday – Saturday) with variable hours during the day. The Library building has had several problems with flooding after heavy rains over the past several years, and a new library facility is proposed for construction in 2019 or 2020.

PUBLIC PARKS AND RECREATION FACILITIES

Public parks and recreation centers also provide buildings and grounds for cultural activities. Key venue facilities for cultural events include:

- ✧ **Orangeburg Community Center/Gymnasium** located at 410 Broughton Street provides a 2,300-SF building to accommodate 700- persons with two basketball courts, concession stands, restrooms, and multi-purpose rooms.
- ✧ **Orangeburg Canteen Community Center** on Middleton Street
- ✧ **Albergotti Park** provides a Picnic Shelter on Riverside Drive in addition to playgrounds, ballfields, and tennis courts
- ✧ **Duncan Street Playground** off Magnolia Street features a Picnic Shelter, swings, and a Basketball Court
- ✧ **Glover Street Park** provides a picnic shelter
- ✧ **Mirmow Field** provides avenue to serve American Legion, Claflin University, and Dixie Pre-Majors Baseball teams at a facility located at the corner of Whaley Street and Rowe Street
- ✧ **Zimmerman Community Center** on Peasely Street is available for rental and supports a baseball field
- ✧ **Hillcrest Park** provides a golf course and clubhouse, tennis courts and ballfields

PRIVATE FACILITIES

Event venues also include a number of private facilities. **The Orangeburg County Fair** is not a part of the County government, but was organized in 1911 by a group of local stockholders that set up the Orangeburg County Fair Association. They purchased two properties totaling 32.65 acres off Magnolia Street south of Whaley Street, built exhibit halls, and held the first fair in November that year. The stockholders added a racetrack and a caretaker’s residence in 1912. Football and baseball bleachers were added and in 1916, Clemson and the Citadel played the first college football game held in Orangeburg. Additional land was added over the years and several buildings were

constructed by the County through with lease agreements. The annual County Fair continues to be held each fall and the Association continues as a 501(c) 3 non-profit corporation. The facilities include several large exhibit barns and sheds at 350 Magnolia Street.

The Orangeburg Country Club has a grand ballroom, four banquet halls and a full range of amenities. The Broughton, the Liberty Room, Ross Centre, D'Vine on Russell, and the Cinema are a few of the private event venue rental resources that serve the city and offer banquet, meeting, and reception rooms. The Matriarch B&B, Holiday Inn, Baymont Inn, Fairfield Inn, Hampton Inn, and many other hotels provide additional private for-rental facilities.

Downtown Orangeburg, the Prince of Orange Mall, and other commercial retail centers provide additional private resources and support for local social interaction and commerce.

MUSEUMS & MEMORIALS

- ✧ Many of the museum and exhibition resources have been discussed above. The list below reiterates their value to the community:
The I.P. Stanback Museum and Planetarium, located on the campus of the South Carolina State University, provides scientific and technological programs in a purpose-built 16,000-SF building constructed in 1980. The planetarium offers a variety of programs throughout the year.
- ✧ **The Arthur Rose Museum** at Claflin University
- ✧ **The Alex Salley Archives Building managed by the Orangeburg Historical Society**
- ✧ **The Dixie Library**
- ✧ **The Judge Glover Home** on Whitman Street
- ✧ **The Hawthorne School of Aeronautics Exhibit at the Orangeburg Municipal Airport.**
- ✧ **The Orangeburg National Fish Hatchery** aquarium center and fish production facilities.
- ✧ **Edisto Memorial Gardens** includes many activities and special activity areas, including the following:
 - American Rose Society Award of Excellence Test Garden
 - Andrew Berry Terrace Garden
 - Boat Landing
 - Butterfly Garden
 - Centennial Park
 - Horne Wetland Park
 - Mountain Brook
 - Noisette Garden

- Orangeburg County Fine Arts Center and Garden
- Sensory Garden
- Summers Memorial Park
- Water Wheel
- Veterans Memorial Park

❖ **The Orangeburg Downtown Square** is the location of the former county courthouse facilities and includes several monuments and relics of the City's past. The old First Presbyterian Church of Orangeburg Cemetery is located across the street.

CULTURAL EVENTS AND SERVICES

Annual events and services include numerous festivals and events held in Orangeburg and Orangeburg County throughout the year. A partial listing of some of those events includes these events below:

- **Grand American Hunt** (Early January) - Coon hunting enthusiasts from throughout the US - Orangeburg County Fairgrounds.
- **Henderson-Davis Players Presentation** (January to June)
- **Orangeburg Part-Time Players Presentation** (Early March) - The Bluebird Theater.
- **Car Show on the Square** (Early April) - The Orangeburg Square.
- **S.C. Philharmonic Orchestra/S. C. State University Choir Concert** – (Mid-April) - Martin Luther King Auditorium.
- **S.C. Festival of Roses in Orangeburg** (Late April) - Weekend of family fun and entertainment, music, sports, races, arts and crafts.
- **Senior's Day at the Rose Festival** (Late April) - Tour of Roses, entertainment and refreshments for senior citizens.
- **Orangeburg Part-Time Players Presentation** (Late June) - the Bluebird Theater.
- **DORA Block Party Dance** (August) – Downtown Orangeburg.
- **S.C. Queen of Roses Pageant** (Late September) - Stevenson Auditorium.
- **Orangeburg County Fair** (September or October).
- **Holiday Arts & Crafts** (Mid-October) -First Baptist Church of Orangeburg Family Life Center.
- **The Regional Medical Center Christmas Tree Lighting Program** (Late November or early December).
- **Children's Garden Christmas** (Late November through December -Lighted displays of Christmas in Edisto Memorial Gardens.
- **Orangeburg County Christmas Parade** (Early December).
- **S.C. State University Choir Concert and Claflin University Concert Choir (Early December).**

4.5 CULTURAL AND HISTORIC RESOURCES GOALS AND POLICIES

The Community appears to be committed to the arts and to providing opportunities for broad based citizen participation to match local interests.

For the most part existing facilities are adequate for their intended function, following improvements to Stevenson Auditorium in 2000. Additional planned improvements to Stevenson include expansion of restrooms and development of a courtyard between Stevenson and eventual home to Council Chambers (Old Fire Station). With additional improvements to certain other facilities, they could become they could be outstanding.

The Community is also cognizant of its history and is committed to historical preservation, recognizing that the future is built on the past.

GOAL	POLICY	ACTION	STATUS
Goal 4.1: Promote Greater Appreciation of the Community’s Cultural Facilities and Events	Policy 4.1.1: Preserve the character of historic neighborhoods and districts.	Maintain and circulate a comprehensive calendar of events, including continued publication of notices i n t h e newspaper.	
		Create community date-book on City of Orangeburg website.	
		Encourage student participation in cultural events.	
Maintain Cultural Facilities in Structurally Sound and Aesthetically Pleasing Conditions to Maximize Use and Foster Community Pride.	Stevenson Auditorium is the City’s primary cultural facility and a source of community pride.	Promote and maintain Stevenson Auditorium as the primary cultural facility and a source of community pride.	
		Continue use of Stevenson Auditorium to foster the arts, and accommodate civic & public events	

GOAL	POLICY	ACTION	STATUS
		<p>The Fine Arts Center also is an integral part of the cultural composite of the City.</p> <p>These facilities and others should be maintained in show-case condition to maintain support to the arts and the cultural development of the Community.</p>	
<p>Promote and Encourage Interest in All Aspects of the Community's History</p>		<p>Commit to preserving and maintaining historically accurate properties and increasing public awareness</p>	
<p>Bring About a Closer Relationship Among Persons in the Community Who Are Interested in History.</p>		<p>Increase support of and participation in historical preservation.</p>	
<p>Encourage the Preservation of Historical Sites, Materials, and Records of the Community.</p>	<p>Strategies designed to help implement this goal include:</p>	<p>Identify and restore selected properties.</p>	
		<p>Educate public on the importance and benefits of historic preservation</p>	
		<p>Apply Historic Conservation Zoning protection for properties and areas of historical significance identified herein.</p>	
<p>Link the Community's Cultural Facilities and Resources with the <u>Heritage Corridor</u></p>		<p>Chamber is in an excellent position to provide the much needed link to the corridor and promote economic activities associated with use of the corridor</p>	<p>Orangeburg Chamber of Commerce has been designated as an official stop on the Heritage Corridor.</p>