

APPENDIX H: MAJOR RIVER BASINS & THREATENED & ENDANGERED SPECIES

Gullah Geechee Cultural Heritage Corridor River Basins

| Basin | State(s) | CHC County(ies) | Major Tributaries | Significance | Water Quality |
|-----------|-------------------------|---|--|---|---|
| Savannah | South Carolina, Georgia | Jasper (SC), Chatham (GA), Effingham (GA) | Brier Creek, Boggy Branch | <p>About 7% of the land within the basin is protected by federal, state, or private entities which include a wildlife management area, wildlife center, national wildlife refuge, and a heritage preserve (SCDNR, 2006).</p> <p>There are several areas of primary concern within the Savannah River Basin and these include the Savannah River and the Brier Creek/Boggy Gut Creek system. These areas contain various assemblages of fish populations that are on the state’s Priority Species List, such as the shortnose sturgeon (also federally listed as endangered), robust redhorse, pod lance mussel, Savannah Lilliput mussel, and the bluebarred pygmy sunfish (SCDNR, 2006).</p> <p>The Savannah River has one of the largest discharges of freshwater in the Southeast and it flows through forests, agricultural lands, hydroelectric reservoirs, and one national wildlife refuge.</p> <p>The Savannah River is the tenth largest port in the nation, a major source of water for two major cities in Georgia as well as two in South Carolina, the river is utilized by an Ecological Laboratory in South Carolina and by a nuclear power plant as a major source of generating electricity in Georgia, and the marshlands surrounding the river were once ideal for rice cultivation. The Savannah River’s lower blackwater tributaries are known for their exceptional biological value. Ebenezer Creek in Effingham County is within the basin and is one of Georgia’s four wild and scenic rivers as well as designated national natural landmark (Georgia Encyclopedia, 2009a).</p> | <p>More than half of the sites sampled (seven of ten) by the SCDNR in 2006 were impaired. Water quality issues include lack of invertebrate diversity, and high levels of mercury. These issues do not support aquatic life uses, or have warranted fish consumption advisories (SCDNR, 2006).</p> <p>The Savannah River Basin is experiencing a decline in ecological health. The primary water quality issues in the basin are dams, reservoirs, large-scale logging, municipal drawdown, and dredging are disrupting natural flows and hydrologic regimes which degrade important ecosystems. Other issues include salt-water intrusion leading to increased salinity levels and decreasing fish populations, population growth increasing the amount of wastewater discharge, and the release of radionuclides (such as tritium, cesium, and strontium) from the nuclear power plant (Georgia Encyclopedia, 2009a).</p> |
| Cape Fear | North Carolina | Brunswick, Columbus, New Hanover, Pender | Black River, Northeast Cape Fear River | <p>The Black River contains the most ancient bald cypress trees in eastern North America.</p> <p>The entire Cape Fear River is an important nursery area for juvenile fish, crabs, and shrimp (NCDEP, 2002).</p> | <p>In 1936, three locks and dams were built and are currently maintained by the U.S. Army Corps of Engineers on the Cape Fear River. These locks and dams were built to ensure a minimum channel depth of eight feet from Fayetteville to Wilmington for the passage of large boats and barges. These structures originally blocked the migration routes of several anadromous fish and resulted in the decline of a shad, striped bass, and shortnose sturgeon fishery. The locks and dams are no longer use for navigation and rock ramps have been installed to assist migration of anadromous fish. Several</p> |

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|---------|----------------|---|--|---|---|
| | | | | | <p>organizations have proposed the removal of the structures; however, they are now considered important structures for maintaining the water supply for Wilmington, Fayetteville, and other local users. (NCDEP, 2002).</p> <p>According to the North Carolina State University, about 35% of the streams in the Cape Fear River Basin are considered threatened, 18% are impaired by pollution, and about 27% of the estuaries are use-impaired.</p> |
| Lumber | North Carolina | Brunswick, Columbus | Little Pee Dee River, Lumber River, Waccamaw River, coastal area drainage basins | <p>The Lumber River is one of four Natural and Scenic Rivers in North Carolina, has 81 miles of river designated as a National Wild and Scenic River, and contains three Outstanding Resource Waters, one of which is in the cultural heritage corridor (Lake Waccamaw).</p> <p>Waccamaw Lake is an example of special wetlands known as Carolina bays, and is one of the most species-rich lakes in the Western hemisphere. (NCDEP, 2007).</p> | Water quality in the Lumber River Basin is generally good and supports swimming, boating, and shellfish harvesting. Mercury contamination has been found in some species. |
| Pee Dee | South Carolina | Horry, Marion, Williamsburg, Georgetown | Black River, Lynches River, Pee Dee River, Little Pee Dee River, Waccamaw River | <p>The basin contains several heritage preserves and other significant protected areas such as mitigation sites and a wildlife refuge.</p> <p>The ecobasin contains several priority-listed fish species such as the "broadtail" madtom, robust redhorse, Carolina pygmy sunfish and the federally endangered shortnose sturgeon. Priority-listed mussel species found within the basin include the Waccamaw spike, yellow lampmussel, Roanoke slabshell, and the rayed pink fatmucket (SCDNR, 2006).</p> | According to the South Carolina Department of Natural Resources, in 2006, the water quality in the Pee Dee River Basin was found to be impaired at 70 of the 110 sites that were tested. Water quality issues include low dissolved oxygen, abnormal pH, lack of invertebrate diversity, copper and zinc contamination, high concentrations of fecal coliform bacteria, and high levels of mercury. These issues at various sites do not support aquatic life uses, recreational uses, or have warranted fish consumption advisories (SCDNR, 2006). |
| Santee | South Carolina | Berkeley, Williamsburg, Georgetown, Charleston | Santee River | About 27% of the land within the basin is protected by federal, state, or private entities which include national forests, a wilderness area, a botanical and zoological area, and a heritage preserve (SCDNR, 2006). | More than half of the sites sampled (ten of sixteen) by the SCDNR in 2006 were impaired. Water quality issues include lack of invertebrate diversity, high concentrations of fecal coliform bacteria, and high levels of mercury. These issues do not support aquatic life uses, recreational uses, or have warranted fish consumption advisories (SCDNR, 2006). |
| Edisto | South Carolina | Beaufort, Berkeley, Charleston, Colleton, Dorchester, | Edisto River, Salkehatchie River | About 7% of the land within the basin is protected by federal, state, or private entities which include a national forest, an Audubon forest and preserve, plantations, a national wildlife refuge, and a wildlife management area. The ACE Basin also contains Lake Moultrie, which is the only major reservoir in the coastal plain (SCDNR, 2006). | According to the South Carolina Department of Natural Resources, in 2006, the water quality in the ACE Basin was found to be impaired at 72 of the 115 sites that were tested. Water quality issues include a lack of invertebrate diversity, low dissolved oxygen, zinc and chromium excursions, abnormal pH, high turbidity, high |

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| | | Jasper | | There are several areas of primary concern within the ACE Basin. These areas include the Jasper County wetlands, the Cypress/Beaver Dam Creek systems, the Sandy Run system, and the lower North Fork Edisto and mainstem Edisto Rivers. These areas contain various assemblages of fish populations that are on the state's Priority Species List, such as the bluebarred pygmy sunfish, "broadtail" madtom, shortnose sturgeon (also federally listed as endangered), bannerfin shiner, striped bass, and bluefin killifish (SCDNR, 2006). | concentrations of fecal coliform bacteria, and high levels of mercury. These issues at various sites do not support aquatic life uses, recreational uses, or have warranted fish consumption advisories (SCDNR, 2006). |
| Salkehatchie | South Carolina | Colleton | Salkehatchie River, Whippy Swamp, Lemon Creek, Little Salkehatchie River | The Salkehatchie is a blackwater system. The basin's main land uses or cover are forested land and agricultural land. | At the time of the release of SCDHEP's "Watershed Water Quality Assessment" for the Salkehatchie River in 2010, a fish consumption advisory had been issued for the Little Salkehatchie and portions of the Salkehatchie Rivers due to mercury content. (SCDHEC, 2010) Aquatic life and recreational uses are generally fully supported within the basin. There are a few areas where the total phosphorus concentration and chlorophyll excursions, or excesses of copper and zinc, do not support aquatic life uses. There are also seven areas that partially support recreational uses due to fecal coliform bacteria excursions. (SCDHEC, 2010) |
| Ogeechee | Georgia | Bryan, Chatham, Effingham, Liberty | Ogeechee, Canoochee | The Ogeechee River is one of Georgia's last remaining free flowing streams, and plays a major role in forming the coastal islands (Georgia River Network, 2010). | Forestry and agriculture comprise the major economies in the basin. The issues affecting water quality mainly include wastewater discharge and accidental sewage spills, and high levels of mercury in waterways, and in fish and seafood. |
| Altamaha | Georgia | Long, McIntosh, Wayne, Glynn | Altamaha, Ocmulgee, and Oconee Rivers | Dubbed as "Georgia's Mightiest River," the Altamaha is one of the few free flowing rivers in Georgia, and is the 7 th most endangered river in the United States. One of its tributaries, the Oconee River, does contain impoundments. The basin is one of the most biologically diverse river systems on the Atlantic coast, and sustains globally rare natural communities including the only known examples of old-growth longleaf pine-black oak forest in the country, which once encompassed about 90 million acres and currently only about 3-4 million acres remain. The basin is also home to 11 imperiled pearly mussel species, 7 of which are found nowhere else in the world (The Nature Conservancy, 2010; and Georgia Encyclopedia, 2004). | Agriculture is the main land use activity in the basin, and other uses include logging, and mining. According to the University of Georgia, the state and EPA sampled surface waters in the basin and found that only 6% of these samples have water quality issues. These issues include pollutants from urban runoff, storm drainage, sewage discharge, and municipal point sources. The basin has reported fish consumption advisories (University of Georgia River Basin Center, 2001). |

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| | | | | The Altamaha River in Glynn and McIntosh Counties was recognized as a major reserve for shorebirds by the Western Hemisphere Shorebird Reserve Network in 1999. In 1991 the river was designated a bioserve and was also listed as one of 75 “Last Great Places” in the world by The Nature Conservancy. (The Nature Conservancy, 2010). | |
| Satilla-St. Mary’s | Georgia, Florida | Charlton (GA), Camden (GA), Nassau (FL) | Okefenokee and Pinhook swamps | <p>The basin supplies about 50% of Georgia’s groundwater and consists of smaller rivers, creeks, swamps, and wetlands. The surrounding land cover is mainly forest, but also includes urban landscapes and agricultural lands. The basin produces peanuts, corn, cotton, oats, rye, sorghum, soybeans, and tobacco, and is a prominent area of animal agriculture in the state (Georgia River Network, 2010).</p> <p>According to the Georgia River Network, the basin has low species diversity due to its acidic waters, low alkalinity, extreme variation in flows, and its relatively homogenous habitat. (2010) The basin does, however, support major fisheries and contains the rare banded topminnow.</p> | <p>Development, industrial and residential pollution, and agricultural runoff on the Satilla River is very low, however, as of 2002, about 19 rivers and streams and 7 estuaries in the Satilla River Basin were not meeting their designated use of fishing (Georgia Encyclopedia, 2009b; and Georgia River Network, 2010).</p> <p>Even though the St. Mary’s River basin is a blackwater basin, it has relatively low pollution due to limited development and use, generally excellent water quality, and is biologically diverse. The basin does have some specific points of deterioration due to surface water discharges and wastewater treatment plant. Other concerns include secondary impacts from development such as runoff from lawns, streets, and septic tanks (SJR, 2010).</p> |
| Nassau-St. Mary’s | Georgia, Florida | Charlton (GA), Camden (GA), Nassau (FL) | Okefenokee and Pinhook swamps | <p>The basin has many water features, including the Atlantic Intracoastal Waterway. Several rivers and streams within this basin are designated as Outstanding Florida Waters, most of which flow through various state parks and reserves, aquatic preserves, national park units, a recreational area, and a national forest. The St. Mary’s watershed begins in Georgia and consists mostly of floodplains, and the Nassau watershed is largely undeveloped. The main use in the Nassau watershed is silviculture. St. Mary’s inlet provides a passageway for commercial, recreational, and naval vessels (FLDEP, 2010a).</p> <p>The aquatic preserves contain various rare and endangered species including the Atlantic sturgeon, Florida manatee, right whale, and leatherback turtle. The basin also contains several swamps, marshes, and wetlands that support large and diverse bird populations as well as several rookeries. Two areas within the Nassau watershed have been designated as Critical Wildlife Areas (FLDEP, 2010a).</p> | <p>Even though the St. Mary’s River basin is a blackwater basin, it has relatively low pollution due to limited development and use, generally excellent water quality, and is biologically diverse. The basin does have some specific points of deterioration due to surface water discharges and wastewater treatment plant. Other concerns include secondary impacts from development such as runoff from lawns, streets, and septic tanks (SJR, 2010).</p> |

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| Lower St. Johns | Florida | St. Johns, Duval | | <p>The Lower St. John’s River is only one of a small portion of major rivers in the United States that flow north, and the basin also includes the Atlantic Intracoastal Waterway. Several rivers and streams within this basin are designated as Outstanding Florida Waters, most of which flow through various state parks and reserves, a state forest and garden, aquatic preserves, national park units, a military reservation, and a wildlife management area (FLDEP, 2010b).</p> <p>According to the Florida Department of Environmental Protection (2010), a portion of the Lower St. John’s River has a federally designated and maintained 38-foo-deep, and 400-1,200-foot-wide navigational channel, home of the nation’s 14th largest deepwater port. Land uses in the basin include development, silviculture, agriculture, and mineral mining.</p> | <p>While many of the water quality issues associated with historic septic systems have been resolved, the basin still has a nutrient problem. Blue-green algal blooms and fish kills are periodic events in the basin and high concentrations of heavy metals are found at the freshwater and saltwater mixing zone (FLDEP, 2010b).</p> |
| Upper East Coast | Florida | St. Johns | | <p>The basin includes the Atlantic Intracoastal Waterway. Several rivers and streams within this basin are designated as Outstanding Florida Waters, most of which flow through various aquatic preserves, as well as state parks, reserves, and recreation areas.</p> | <p>Primary land uses within the basin are silviculture, agriculture, and conservation, and the area is experiencing development pressure. The basin’s natural hydrology has been significantly altered by water control structures, dikes, drainage ditches, and canals. The basin has experienced water quality issues. In 1995, a significant portion of shellfish-harvesting areas were classified as “conditionally restricted” due to high levels of coliform bacteria. Also, currently, several areas within the basin have been identified as having potential septic tank problems (FLDEP, 2010c).</p> |

Threatened and Endangered Species

Mammals

| Species | Federal Status | State Status | Location(s) | Threats |
|--|----------------|--------------|--|--|
| West Indian Manatee (<i>Trichechus manatus</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); GA: Bryan, Camden, Chatham, Glynn, Liberty, McIntosh | Collisions with boats; loss of warm water habitat; loss of natural springs from increasing demands on water usage from development pressure; crushing by flood gates and canal locks; fishing lines and trash; natural events (unusually cold winters, red tide blooms); harassment by divers, fishermen, and boaters interrupting feeding and breeding (USFWS, 2010a) |
| Finback whale (<i>Balaenoptera physalus</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); GA: All CHC (Coastal Counties); SC: All CHC (Coastal Counties); NC: All CHC (Coastal Counties) | Development, habitat destruction, and ship collisions (Whale Center of New England, 2009) |
| Humpback whale (<i>Megaptera novaeangliae</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); GA: All CHC (Coastal Counties); SC: All CHC (Coastal Counties); NC: All CHC (Coastal Counties) | Entanglements in fishing gear, collisions with ship traffic, and pollution/habitat destruction of their coastal habitat from human uses. (Whale Center of New England, 2009) |
| Right whale (<i>Balaena glacialis</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); GA: Bryan, Camden, Chatham, Glynn, Liberty, McIntosh; SC: All CHC (Coastal Counties); NC: All CHC (Coastal Counties) | Collisions with ships, entanglement in fishing nets, conflicting uses within their habitat (Naval warfare training, shipping traffic, and oil drilling), and lack of genetic diversity due to small population sizes and inbreeding (Whale Center of New England, 2009) |
| Sperm whale (<i>Physeter macrocephalus</i>) | Endangered | Endangered | NC: All CHC (Coastal Counties) | Natural predators (killer whales, pilot whales, large sharks), illegal whaling, collisions with ships, entanglement in fishing nets, habitat disturbance from noise from oil and gas operations, and the accumulation of stable pollutants (PCBs, DDT, DDE, PAHs, and heavy metals) (NMFS, 2010a) |

| Species | Federal Status | State Status | Location(s) | Threats |
|--|-----------------------|---------------------|--------------------------------|--|
| Caribbean monk seal (<i>Monachus tropicalis</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties) | Overhunting; loss of critical habitat and decline in prey due to fishing, coastal development and other exploitation activities (NMFS, 2010b) |
| Anastasia Island beach mouse (<i>Peromyscus polionotus phasma</i>) | Endangered | Endangered | FL: St. Johns | Loss or alteration of habitat due to development and human use; competition with house mice; killed by house cats; loss of habitat from flooding and erosion associated with hurricanes and coastal storms; and habitat fragmentation and genetic isolation due to development along the Atlantic Coast (USFWS, 2005a) |
| Gray Bat (<i>Myotis grisescens</i>) | Endangered | Endangered | FL: Statewide | Minimal availability of critical habitat makes them extremely vulnerable to disturbance; decreased habitat as caves are flooded and submerged by reservoirs or natural flooding; cave commercialization and improper gating; pesticides and pollution; stream channelization, deforestation, and agricultural development (USFWS, 2010b) |
| Indiana Bat (<i>Myotis sodalis</i>) | Endangered | Endangered | GA: Statewide | Minimal availability of critical habitat makes them extremely vulnerable to disturbance; decreased habitat as caves are flooded and submerged by reservoirs or natural flooding; cave commercialization and improper gating (USFWS, 2010c) |

Birds

| Species | Federal Status | State Status | Location(s) | Threats |
|---|----------------|--------------|--|--|
| Wood stork (<i>Mycteria americana</i>) | Endangered | Endangered | FL: All CHC; GA: All; SC: All | Decrease in food base due to loss of wetlands, changes in water hydroperiods, and altered water flow from levee, canal and floodgate construction; loss of nesting habitat, raccoon predation, and human disturbance of rookeries (USFWS, 2005b) |
| Piping plover (<i>Charadrius melodus</i>) | Threatened | | GA: Statewide; NC: Brunswick, New Hanover, Pender SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper | Habitat destruction, human disturbance, and predation continue to be the primary threats to Piping Plovers. Nests and young can be destroyed by unrestricted off-road vehicles, beach-goers, and unleashed pets. Inland plover populations can be threatened by water management practices on river systems; the release of water from dammed areas may flood nests and young and the redistribution of water during drought periods may disrupt nesting and feeding. (National Audubon Society, 2010) |
| Red-cockaded woodpecker (<i>Picoides borealis</i>) | Endangered | Endangered | GA: Brantley, Bryan, Camden, Chatham, Effingham, Liberty, Long; SC: All; NC: All | Habitat loss; habitat competition with other bird species (FWC, 2010) |
| Bachman's warbler (<i>Vermivora bachmanii</i>) | Endangered | Endangered | SC: Charleston | No actual known threats, theory speculates a loss of habitat from changing vegetation types (cane to timber) and development, or population decline due to severe weather events (i.e., hurricanes); theory also speculates that their large historic breeding range and low population size make it difficult for the warbler to find mates (USFWS, 2010d) |

Fish, Reptiles, Amphibians, Invertebrates

| Species | Federal Status | State Status | Location(s) | Threats |
|---|----------------|--------------|--|--|
| Shortnose sturgeon (<i>Acipenser brevirostrum</i>) | Endangered | Endangered | FL: Statewide (Coastal Counties); GA: Bryan, Chatham, Effingham, Glynn, Long, McIntosh, Wayne; SC: All; NC: All | Loss of habitat due to construction of dams, pollution; habitat alterations from discharges, dredging, or disposal of materials into rivers; development in estuarine or riverine mudflats and marshes; and commercial exploitation (NMFS, 2010c) |
| Smalltooth sawfish (<i>Pristis pectinata</i>) | Endangered | Endangered | NC: Statewide (Coastal Counties) | Extreme vulnerability to overexploitation because of their propensity for entanglement in nets, their restricted habitat, and low rate of population growth; caught and killed as bycatch in various fisheries, especially in gill nets; and the loss of juvenile habitat (such as mangrove forests) due to development. (NMFS, 2010d) |
| Upland combshell (<i>Epioblasma metastriata</i>) | Endangered | Endangered | GA: Statewide (Coastal Counties) | Sedimentation, pollution, and habitat degradation (University of Georgia, 2008) |
| Ochlockonee moccasinshell (<i>Medionidus simpsonianus</i>) | Endangered | Endangered | GA: Statewide (Coastal Counties) | Habitat loss due to siltation, dredging, channelization, impoundments, and pollution; loss of host fish necessary for metamorphosis; competition with zebra mussels (USACE, 2005) |
| Anthony's riversnail (<i>Athearnia anthonyi</i>) | Endangered | Endangered | GA: Statewide (Coastal Counties) | Habitat loss due to siltation and impoundments; pollution from past mining activities; poor land use practices; and waste discharges (Garner et al, 1997) |
| Frosted flatwoods salamander (<i>Ambystoma cingulatum</i>) | Threatened | Threatened | GA: Bryan, Chatham, Liberty, Long, McIntosh; SC: Beaufort, Berkeley, Charleston, Jasper | Habitat loss from logging, urban sprawl, agriculture, invasive plants, and drought (Endangered Species Coalition, 2010) |
| Eastern indigo snake (<i>Drymarchon corais couperi</i>) | Threatened | Threatened | FL: All CHC; GA: Bryan, Camden, Liberty, Long, McIntosh, Wayne | Collection for domestic and international pet trade; mortality from gassed gopher tortoise burrows by rattlesnake collectors; habitat loss and fragmentation from residential and commercial development, and agricultural interests; and pollution (pesticides, rodenticides) (NWWTF, 2010) |

| Species | Federal Status | State Status | Location(s) | Threats |
|--|--|--|---|---|
| Green sea turtle (<i>Chelonia mydas</i>) | Endangered (FL) Threatened (GA, NC) | Endangered (FL) Threatened (GA, NC) | FL: All CHC (Coastal Counties); GA: Bryan, Camden, Chatham, Glynn, Liberty, McIntosh; SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper; NC: Brunswick, New Hanover, Onslow, Pender | Destruction and alteration of nesting and foraging habitats; incidental capture in commercial and recreational fisheries; entanglement in marine debris; and vessel strikes (NMFS, 2010e) |
| Hawksbill sea turtle (<i>Eretmochelys imbricata</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper; NC: Brunswick, New Hanover, Onslow, Pender | Destruction and alteration of nesting and foraging habitats; incidental capture in commercial and recreational fisheries; entanglement in marine debris; and vessel strikes (NMFS, 2010e) |
| Kemp's ridley sea turtle (<i>Lepidochelys kempii</i>) | Endangered | Endangered | GA: All CHC (Coastal Counties); SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper | Destruction and alteration of nesting and foraging habitats; incidental capture in commercial and recreational fisheries; entanglement in marine debris; and vessel strikes (NMFS, 2010e) |
| Leatherback sea turtle (<i>Dermochelys coriacea</i>) | Endangered | Endangered | FL: All CHC (Coastal Counties); GA: Bryan, Camden, Chatham, Glynn, Liberty, McIntosh; SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper; NC: Brunswick, New Hanover, Onslow, Pender | Destruction and alteration of nesting and foraging habitats; incidental capture in commercial and recreational fisheries; entanglement in marine debris; and vessel strikes (NMFS, 2010e) |

| Species | Federal Status | State Status | Location(s) | Threats |
|--|----------------|--------------|---|---|
| Loggerhead sea turtle (<i>Caretta caretta</i>) | Threatened | Threatened | FL: All CHC (Coastal Counties); GA: Bryan, Camden, Chatham, Glynn, Liberty, McIntosh; SC: Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper; NC: Brunswick, New Hanover, Onslow, Pender | Destruction and alteration of nesting and foraging habitats; incidental capture in commercial and recreational fisheries; entanglement in marine debris; and vessel strikes (NMFS, 2010e) |

Plants

| Species | Federal Status | State Status | Location(s) | Threats |
|--|----------------|--------------|--|---|
| American chaffseed (<i>Schwalbea americana</i>) | Endangered | Endangered | FL: Statewide; SC: Beaufort, Berkeley, Charleston, Georgetown, Horry, Jasper, Williamsburg; NC: Pender | Vulnerable to competition due to low numbers and rare populations; loss of habitat from development, roads, wetland drainage, and pine forest management; and fire suppression (North Carolina Natural Heritage Program, 2010) |
| Pondberry (<i>Lindera Melissifolia</i>) | Endangered | Endangered | GA: Effingham; SC: Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry, Jasper; NC: Onslow | Drainage ditching, conversion of habitat, domestic hogs, cattle grazing, and timber harvesting (USFWS, 2003) |
| Hairy rattleweed (<i>Baptisia arachnifera</i>) | Endangered | Endangered | GA: Brantley, Glynn, Wayne | Logging, fire suppression, and residential and commercial development (USFWS, 2007) |
| Seabeach amaranth (<i>Amaranthus pumilus</i>) | Threatened | Threatened | SC: Charleston, Georgetown, Horry; NC: Brunswick, New Hanover, Onslow, Pender | Construction of beach stabilization structures, beach erosion, tidal inundation, beach grooming, insect herbivory, feral animals, and off-road vehicles (USFWS, 2010e) |
| Canby's dropwort (<i>Oxypolis canbyi</i>) | Endangered | Endangered | SC: All | Habitat loss or alteration; competition; road construction; and predation (USFWS, 2010f) |
| Rough-leaved loosestrife (<i>Lysimachia asperulaefolia</i>) | Endangered | Endangered | NC: All | Habitat loss or alteration due to fire suppression, wetland drainage, and residential and commercial development (USFWS, 2010g) |
| Cooley's Meadowrue (<i>Thalictrum cooleyi</i>) | Endangered | Endangered | NC: Brunswick, Columbus, New Hanover, Onslow, Pender | Loss of habitat; ecological succession, agricultural uses, forestry, development, and road construction (USFWS, 2010h) |
| Golden sedge (<i>Carex lutea</i>) | Endangered | Endangered | NC: Onslow, Pender | Habitat alteration; fire suppression; residential, commercial, and industrial development; road and utility construction; right-of-way management with herbicides; and wetland drainage (silviculture, agriculture, and development) (USFWS, 2010i) |