

## *Executive Summaries from NCWC Grants Awarded to South Carolina*

### **SAMWORTH WMA WETLANDS RESTORATION PROJECT**

**The Samworth Wildlife Management Area Wetlands Restoration Project consists of the restoration and enhancement of 270 acres of decreasing wetlands in Georgetown County, South Carolina (SC).** Samworth Wildlife Management Area is a 1,500-acre property owned and managed by the South Carolina Department of Natural Resources (SCDNR) through the Wildlife Management Area (WMA) program with a goal of maintaining and enhancing the integrity of the natural resources of the area while optimizing public recreational and educational opportunities. The proposed project is bordered to the west by the Great Pee Dee River and to the east by the Waccamaw River and Intracoastal Waterway.

Entrenched in the heart of a mosaic of private and public protected lands, Samworth WMA lies within the Winyah Bay, an Atlantic Coast Joint Venture (ACJV) Focus Area and area of extreme ecological significance in SC. Encompassing over 525,000 acres, the Winyah Bay project area contains the state's largest tidal freshwater wetlands, including 146,000 acres of forested wetlands and tidal freshwater marshes and historic rice fields which have been a fixture on the landscape for hundreds of years. This ecologically important area encompasses the third largest estuarine drainage on the Eastern Seaboard, making the protection of wetland and upland habitats critical in ensuring the health of this ecosystem. Recognizing the importance of connecting conservation lands in this area, the Winyah Bay Task Force was formed by state, federal, non-profit and private partners in the late 1980's to sustain the ecological integrity of one of the largest watersheds on the East Coast. **As of 2019, the Task Force has worked to protect and steward 86,219 acres of public lands (parks, National Wildlife Refuges, WMAs, etc.) and 73,145 acres of private properties (easements, deed restrictions, etc.). Partners have also collaborated to restore and enhance thousands of acres of wetlands on public and private lands to ensure that quality habitat is in place for the benefit of both wildlife and the public in this important coastal wetland habitat complex.**

Expanding conservation efforts by partners in the region, this project will restore 270 acres of NWI classified decreasing wetland types in historic rice field impoundments. **Managed impoundments in coastal South Carolina have higher species richness of fishes than nearby tidal creeks (Robinson and Jennings 2014); while many ducks and shorebird species use managed impoundments at higher frequencies than tidal marshes (Rundle and Fredrickson 1981; Weber and Haig 1996; Gordon et al. 1998).** The Winyah Bay landscape is home to more than 66 songbirds, including painted buntings, prothonotary warblers and summer tanagers. The project area is also a preferred stopover site for countless migratory birds such as shorebirds, wading birds, waterfowl and birds of prey. By ensuring high quality wetland habitat, this project will benefit both state and federally listed species, State Wildlife Action Plan (SWAP) species of conservation concern, and a multitude of relatively common species that depend upon these wetland ecosystems throughout their life cycles. Ducks Unlimited (DU) and SCDNR have a longstanding partnership and recognize the significant value of the proposed project's wetland habitat. This National Coastal Wetlands Conservation Grant Program (NCWCGP) funding would ensure that the restoration and enhancement of this critically important wetland area in coastal SC will be completed.

### **SANTEE COASTAL RESERVE WETLANDS RESTORATION PROJECT**

**The Santee Coastal Reserve Wetlands Restoration Project consists of the restoration and enhancement of 3,308 acres of predominantly decreasing wetlands and associated maritime forest in Charleston County, South Carolina.** Santee Coastal Reserve is a 24,000-acre property owned and managed by the South Carolina Department of Natural Resources (SCDNR) through the Wildlife

Management Area (WMA) program. The proposed project is bordered to the north by the South Santee River – the second largest river basin on the east coast – and to the east by the Intracoastal Waterway.

Adjacent to Francis Marion National Forest and neighboring Cape Romain National Wildlife Refuge (NWR), Santee Coastal Reserve lies in the heart of the Atlantic Coast Joint Venture's (ACJV) Santee River Focus Area. This ecologically important area encompasses approximately 32% of South Carolina's coastal marshes and managed tidal wetlands, which support a significant portion of the state's wetland-dependent species. Recognizing the importance of connecting conservation lands in this area, the Santee Basin Task Force was formed by state, federal, non-profit and private partners to protect this region from the development rapidly expanding from both Charleston and Myrtle Beach. **As of 2016, the Task Force has worked to protect and steward 610,642 acres of public lands (parks, national forests, national wildlife refuges, WMAs, etc.), and 100,975 acres of private properties (easements, deed restrictions, etc.).** Partners have also collaborated to restore and enhance thousands of acres of wetlands to ensure that quality habitat is in place for the benefit of both wildlife and the public.

Building off of conservation efforts by partners in the region, this project will restore 3,308 acres of decreasing wetland types and associated maritime forest habitat and help conserve additional declining wetlands types. By ensuring high quality wetland habitat, this project will benefit both state and federally listed species, State Wildlife Action Plan (SWAP) species of conservation concern and a multitude of relatively common species that depend upon these wetland ecosystems throughout their life cycles. Ducks Unlimited (DU) has a longstanding partnership with SCDNR and has coordinated with them to prepare this proposal. Both DU and SCDNR value the significance of the project's wetland habitat and share in the desire to see restoration commence as soon as financially feasible. This National Coastal Wetlands Conservation Grant Program (NCWC) funding would ensure that the restoration and enhancement of this critically important wetland area in coastal South Carolina be completed.

## **SOUTH FENWICK ISLAND PROJECT**

The **South Fenwick Island project** is made up of eight parcels totaling 400.94 acres, the majority of which is forested in maritime barrier island species and patches of loblolly pine, interspersed with old fields and eight man-made freshwater ponds in the interior. The project lands are bordered to the west by the Ashepoo River, to the east by the South Edisto River, to the north by North Fenwick Island and the mainland, and to the south by extensive marsh, Otter and Pine Islands. Fish Creek flows into the interior of the island.

The island is in the heart of the nationally renowned ACE Basin National Estuarine Research Reserve (confluence of the Ashepoo-Combahee-Edisto Rivers) whose parcels contain tracts managed by the United States Fish and Wildlife Service, land trusts, private landowners, and the State of South Carolina. The Basin encompasses approximately 1.1 million acres of uplands, marsh, managed tidal wetlands, and coastal islands. Of this total area, 217,000 acres have been protected from development in perpetuity.

The South Fenwick project lands and associated marine/estuarine environments boast a high diversity of priority species in the South Carolina Department of Natural Resources' Wildlife Action Plan—57 terrestrial species and 43 aquatic species in all—most notably the federally listed wood stork (threatened), West Indian/Florida Manatee (endangered), Atlantic sturgeon (endangered), and shortnose sturgeon (endangered). The federally endangered Kirtland's warbler is suspected to utilize the island's habitats during migration. Several more state-listed and petitioned species use the tract for breeding, foraging, or stopover habitat during migration.

Unique features include a wood stork roost and a great egret nest colony. Openings and old fields may be suitable to planting in native wildflowers for monarch butterflies and other pollinator species. Game and furbearer species such as white-tailed deer, Eastern wild turkey, river otter, and mink are also plentiful. In fact, the mink from these marshes were used several years ago for a restocking effort in other coastal areas missing mink. Cultural resources are prolific on the property and include Revolutionary and Civil War period sites, some of which include a Civil War fort, tabby remains of the original Seabrook Plantation house, a windmill, and a cistern. The property lies within two heritage corridors important to tourism in the State.

Preservation of as much of this sea island as possible would help conserve several National Wetland Inventory-designated wetland types. In addition, the property's forests help protect aquatic life by buffering both the Edisto and Ashepoo Rivers and their associated tidal creeks. The island sits in a significant estuary that supports an abundance marine fish and invertebrates that are commercially important and of conservation concern. The S Department of Natural Resources anticipates receiving National Coastal Wetlands Conservation Grant Program funding to support the fee-simple purchase of all parcels as a single tract. The property will be protected in perpetuity as part of the National Estuarine Research Reserve which will be open to the public for a multitude of environmental and cultural activities. This project constitutes a keystone purchase that will open the door for other willing landowners to sell their parcels with the ultimate goal of protecting the entire island. The 400.94 acres in this project proposal equal about 74% of the property of the total island.

## **SANTEE ISLAND PROJECT**

The South Carolina Department of Natural Resources and its conservation partners request a National Coastal Wetlands Conservation Program investment of \$1,000,000 toward the fee-simple purchase of the **Santee Island tract** in the Santee Watershed of Georgetown County, South Carolina. This 1,964-acre tract is part of a larger 19,000-acre hub of conservation lands and is the last large parcel needed to connect state and private lands to the southeast to the federal lands of the Francis Marion National Forest to the northwest. With its acquisition, the Santee Island tract will protect the juncture of the North and Santee Rivers, both of which are Federally Designated Critical Habitat for the Atlantic and Shortnose Sturgeons.

Santee Island is entirely wetland with 99% being nationally declining wetland types. South Carolina Natural Heritage Program tracked priority ecological communities include bottomland hardwoods and cypress-tupelo swamp. Santee Island is so named for its location between the mainstem of two rivers and two side branches, making it a true island. The tract is heavily forested except for ~100 acres in historic rice fields with thick, early successional vegetation. Depressional wetlands can be found within one of these old fields. These rice fields have been proposed for addition to the Georgetown County Rice Culture National Register of Historic Places nomination. The forested wetlands and openings are utilized by no less than 117 priority species, 12 of which have some sort of federal designation, and 47 are also of regional conservation concern. Parcel analysis by the South Atlantic Landscape Conservation Cooperative Blueprint rank 96% of Santee as "highest priority" in overall regional priority considering connectivity, reptile and amphibian abundance, habitat for forested wetland birds,

aquatic resource value, and significance for climate change resilience as the property is a prime candidate for *Spartina* marsh migration.

No less than 13 plans and 4 initiatives are supported by acquisition and management of the tract. The federal share for the project is reduced by almost 20% as partners have provided match in anticipation of the protection of Santee Island. It is not often that the conservation community can boast of having completed a corridor, and this tract will do just that if funding is forthcoming. After taking title to the tract, the South Carolina Department of Natural Resources will enroll it in the Wildlife Management Area Program, essentially protecting it in perpetuity and maintaining it as a primitive site for public enjoyment. Water quality values, wildlife habitat, and scenic vistas will thus be maintained on this portion of the Santee River.

### **MEYER LAKE TRACT**

The South Carolina Department of Natural Resources and its conservation partners request National Coastal Wetlands Conservation Program investment of \$1,000,000 toward the fee-simple purchase of the **Meyer Lake tract** in the Lower Savannah River Watershed of Jasper County, SC. This 974-acre tract, made up of three contiguous parcels, is part of a larger, 38,000-acre hub of conservation lands. The Savannah National Wildlife Refuge- Bear Island unit abuts the property to the west, privately protected Exley Plantation to the north, and the Okeetee Club to the east. Multiple other private conservation easements are in the vicinity of the tract. The property would be dedicated as a Heritage Preserve with likely dual enrollment in the Wildlife Management Area Program, protected in perpetuity, and open for public recreation.

The Meyer Lake tract, so named for the 8.75-acre lake on site, also has a 5-acre oxbow lake and at least two isolated wetlands. The majority of the property (80%) is comprised of nationally declining wetland types such as bottomland hardwoods with the balance in upland mixed pine-hardwoods. Besides the bottomland hardwoods, other South Carolina Natural Heritage tracked priority ecological communities include pond cypress savanna and pine savanna. Approximately 2.6 miles of bluff provide important ecotone/transition habitat from the uplands to the bottomlands. Two small tributaries converge on the tract and flow to the Savannah River. The forested tract protects 3.5 miles of river frontage, stabilizing the bank and filtering runoff. Meyer Lake is a tract of "highest priority" for Beaufort-Jasper Water and Sewer Authority, as it abuts their source water intake canal. Additionally, the City of Savannah Utility's water intake is downstream.

A parcel analysis of the Meyer Lake tract through the South Atlantic Conservation Blueprint returned a score of "highest priority." Influencing factors included connectivity, herpetofauna habitat suitability, forested wetland bird habitat, amount and configuration of aquatic resources, and climate resilience. The property is prime habitat for Neotropical migratory birds that require riverine, forest interior habitat for breeding and stopover habitat. In addition, wading birds, waterfowl, and a myriad of herpetofauna and aquatic species utilize the tract. Taxa experts have determined that at least 166 priority species likely utilize the property. Of this, 60 are of regional conservation concern on SEAFWA's Regional Species of Greatest Conservation Need (RSGCN) list. All four of Audubon's Responsibility Bird Species for South Carolina are expected on the

tract. The property abuts Federally Designated Critical Habitat (FDCH) for the Atlantic Sturgeon and 0.83 miles to the south is FDCH for the Frosted Flatwoods Salamander.

Cultural/archeologically significant sites include those from the American Revolution and the Early/Middle Woodland Period. Permanent protection of the property and the management thereof contributes to the goals of no less than nine regional plans and eight initiatives, making this property a priority for conservation and builds off prior investments in the watershed.

## **WACCAMAW RIVER HERITAGE PRESERVE EXPANSION: RIVER OAKS ACQUISITION**

The South Carolina Department of Natural Resources and its conservation partners request National Coastal Wetlands Conservation Program investment of \$1,000,000 toward the fee-simple purchase of the **River Oaks tract** in the Waccamaw River Basin of Horry County, SC. This 980-acre tract, made up of 4 contiguous parcels, is a keystone investment for linking Waccamaw Heritage Preserve, Waccamaw River National Wildlife Refuge, Lewis Ocean Bay Heritage Preserve, and multiple private conservation easements in the region. Once acquired, the River Oaks tract would be designated as a Heritage Preserve with likely dual enrollment in the Wildlife Management Area Program and protected in perpetuity. River Oaks would be open for public recreation such as fishing, hunting, hiking, birdwatching, natural resources education programs, and paddling.

The majority of the property (59%) is composed of nationally declining wetland types with the balance in upland buffer habitat. Priority ecological communities tracked in the Heritage Trust database include cypress-tupelo swamp and bottomland hardwoods. The forested tract protects braided streams and approximately 3 miles of Waccamaw River frontage, stabilizing the banks and filtering runoff. Eight ponds on the tract are stocked with bass and bream. The project supports natural resource goals of no less than 12 management plans and 5 initiatives. The Horry County Open Space Plan's "Priority Conservation Areas" specifically highlights the River Oaks tract for being a habitat link, conservation gap, and habitat corridor worthy of protection. In a study commissioned by The Nature Conservancy, an ecological value was calculated for the floodplains at \$200,000 per year in avoided flooding costs to the nearby municipality of Conway, SC.

A parcel analysis of the River Oaks tract through the South Atlantic Conservation Blueprint returned a score for 97% of the property as in the "highest" to "high" categories for regional importance. Influencing factors included connectivity to a 9,000-acre conservation hub (immediate area), forested wetland bird habitat, and notable amounts and configurations of valuable aquatic resources. The property is prime habitat for Neotropical migratory birds that require riverine, forest interior habitat for breeding and stopover habitat. It contains all 4 of Audubon's "Regional Responsibility Species in South Carolina" for which the State provides breeding habitat for 10-24% of the species' global population. In addition, wading birds, waterfowl, and a myriad of herpetofauna and aquatic species utilize the tract. Taxa experts have determined that priority species known or expected on site due to proximity to known occurrences and/or similarity of habitat number at least 154. Most notable species include the

federally listed Northern Long-eared Bat (Threatened) and Wood Stork (Threatened). The rare, narrow endemic Venus Flytrap has documented occurrences nearby.

Significant cultural/archeological resources expected on site include those of historic and prehistoric occupations. In addition, the tract lies within SC's Gullah-Geechee Heritage Corridor, a National Heritage Area recognizing the unique culture of the area. The combination of ecological and historical values of the River Oaks tract make it a high priority for conservation to benefit South Carolina's wildlife, plants, and its citizens.

### **Approved for funding and awaiting project set-up:**

## **WACCAMAW RIVER HERITAGE PRESERVE EXPANSION: COWPENS TRACT ACQUISITION**

The South Carolina Department of Natural Resources and its conservation partners request a National Coastal Wetlands Conservation (NCWC) Program investment of \$1,000,000 toward the fee-simple purchase of the **Cowpens tract** in the Waccamaw River Basin of Horry County, SC. This 1,659.72-acre tract fills an outparcel in the Waccamaw River Heritage Preserve and continues previous investments in linking this Heritage Preserve with Waccamaw River National Wildlife Refuge, Lewis Ocean Bay Heritage Preserve, and multiple private conservation easements in the region. Once acquired, the Cowpens tract would be added to the existing Waccamaw River Heritage Preserve with dual enrollment in the Wildlife Management Area Program and protected in perpetuity. Cowpens would be open for public recreation such as hunting, hiking, birdwatching, and natural resources education programs with special emphasis on floodplain ecology. The Cowpens tract builds on prior conservation efforts and investments in the region, including the previous successful NCWC grant, "Waccamaw River Heritage Preserve Expansion: River Oaks Acquisition" (F21AP00702).

Almost half of the property is composed of nationally declining wetland types with the balance in higher elevation buffer habitat. Priority ecological communities tracked in the Heritage Trust database include the 111-year-old floodplain swamp forest, pocosins, and a Carolina bay. Planted loblolly pines ranging in age from 16 to 32 are also on site. The forested tract protects ~1.46 miles of Simpson Creek and ~7.7 miles of overall stream/tributary length, stabilizing the banks and filtering runoff. The project supports natural resource goals of no less than 12 management plans and 5 initiatives. The Horry County Open Space Plan, Horry County Imagine 2040 Comprehensive Plan, and the 2020 Draft Upper Waccamaw Conservation Plan spatially identify Cowpens as a significant parcel for preservation.

The South Atlantic Blueprint ranks 100% of the Cowpens tract as a worthy target for conservation, with 96% of it rated as "highest" or "high" priority for conservation action to sustain natural and cultural resources. This score is based on layers evaluating habitat cores, riparian buffers, habitat suitability for indicator species (birds) of conservation concern, terrestrial and aquatic connectivity and species diversity, resiliency, pervious surface, and more. The property is prime habitat for Neotropical migratory birds that require riverine, forest interior habitat for breeding and stopover habitat. In addition, wading birds, waterfowl, and a myriad of herpetofauna and aquatic species utilize the tract. Taxa experts have determined that Species of

Greatest Conservation Need (SGCN) known or expected on site due to proximity to known occurrences and/or similarity of habitat number over 150. Notable species utilizing the property include the federally listed Northern Long-eared Bat (Threatened), Wood Stork (Threatened), and Carolina Birds-in-a-Nest, *Macbridea caroliniana* (At-Risk/Candidate).

Significant cultural/archeological resources expected on site include those of historic and prehistoric occupations. Also, the tract protects the viewshed of the Waccamaw Blue Trail. The combination of ecological and historical values of the Cowpens tract make it a high priority for conservation to benefit South Carolina's wildlife, plants, and its citizens.