

03050112-03
(South Santee River)

General Description

Watershed 03050112-03 (formerly 03050112-050 and the South Santee River portion of –060) is located in Berkeley, Charleston, and Georgetown Counties and consists primarily of the **South Santee River** and its tributaries. The watershed occupies 84,787 acres of the Lower Coastal Plain and Coastal Zone regions of South Carolina. Land use/land cover in the watershed includes: 39.9% forested land, 33.0% forested wetland, 19.8% nonforested wetland, 4.6% water, 1.5% agricultural land, 1.1% urban land, and 0.1% barren land.

The lower Santee River divides into the South Santee River and the North Santee River, both draining into the Atlantic Ocean. The South Santee River is classified FW from its origin to the U.S. Hwy. 17 crossing, SA from the U.S. Hwy. 17 crossing to 1000 feet below the Atlantic Intracoastal Waterway (AIWW) crossing, and ORW from 1000 feet below the AIWW crossing to the Atlantic Ocean. Streams flowing into these sections of the river take on that section’s classification. The Santee Swamp lies between the South and North Santee Rivers. The South Santee River accepts drainage from Chicken Creek (Red Bluff Creek), Wambaw Creek, Hampton Creek (Cedar Creek), Montgomery Creek, Sixmile Creek (Garfish Creek), and Collins Creek. Wambaw Creek accepts drainage from Wambaw Swamp, Mechaw Creek, Mill Branch, Cane Branch (Keepers Branch), and Big Morgan Branch (Little Morgan Branch). Pleasant Creek enters the river downstream of Collins Creek, followed by Fourmile Creek Canal (a segment of the AIWW) and Alligator Creek. This section of the AIWW is classified SFH. Additional natural resources include the Francis Marion National Forest, the Wambaw Creek National Wilderness Area, the Wambaw Swamp National Wilderness Area, the Waterhorn Historic Area, and Hampton Plantation State Park. There are a total of 182.3 stream miles in this watershed, along with 11.8 acres of lake waters, and 2,143.1 acres of estuarine areas.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
CSTL-112	W/INT	FW	WAMBAW CREEK AT EXTENTION OF S-10-857
ST-006	P/INT	FW/SA	SOUTH SANTEE RIVER AT US 17
RT-042062	RT-01	SA	SIXMILE CREEK NEAR CONFLUENCE WITH SOUTH SANTEE RIVER
RO-08344	RO-08	SA	S. SANTEE RIVER, 400 YDS UPSTR. FROM AIWW S OF GOAT ISLAND
RT-06001	RT-06	ORW	ALLIGATOR CK, 0.9 MI SSE OF AIWW CONFL. WITH S. SANTEE RIVER

Wambaw Creek (CSTL-112) – Aquatic life uses are fully supported; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand and total phosphorus concentration. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standard violations. Recreational uses are fully supported.

South Santee River - There are two SCDHEC monitoring sites along the South Santee River. The upstream site (**ST-006**) has both freshwater and saltwater classifications. The freshwater classification is fully supported for aquatic life uses and the saltwater classification is not supported due to turbidity excursions. In addition, both classifications show significant increasing trends in five-day biochemical oxygen demand and turbidity. There is a significant increasing trend in pH for both classifications. Both classifications indicate significant increasing trends in dissolved oxygen demand which suggests improving conditions for this parameter. Recreational uses are fully supported with both classifications. The downstream site (**RO-08344**) is not supporting of aquatic life uses due to turbidity excursions. Recreational uses are fully supported.

Sixmile Creek (RT-042062) – Aquatic life and recreational uses are fully supported.

Alligator Creek (RT-06001) – Aquatic life and recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the South Santee River and Wambaw Creek within this watershed. For more information and the most current advisory, visit <http://www.scdhec.gov/fish>.

Shellfish Monitoring Stations

<u>Station #</u>	<u>Description</u>
06A-01	SOUTH SANTEE RIVER AT ALLIGATOR CREEK
06A-01A	SOUTH SANTEE RIVER NEAR THE MIDPOINT OF GRACE ISLAND
06A-02	SOUTH SANTEE INLET
06B-13	ALLIGATOR CREEK NEAREST SOUTH SANTEE RIVER BETWEEN MARKERS 24&25

Growth Potential

There is a low potential for growth projected for this watershed.

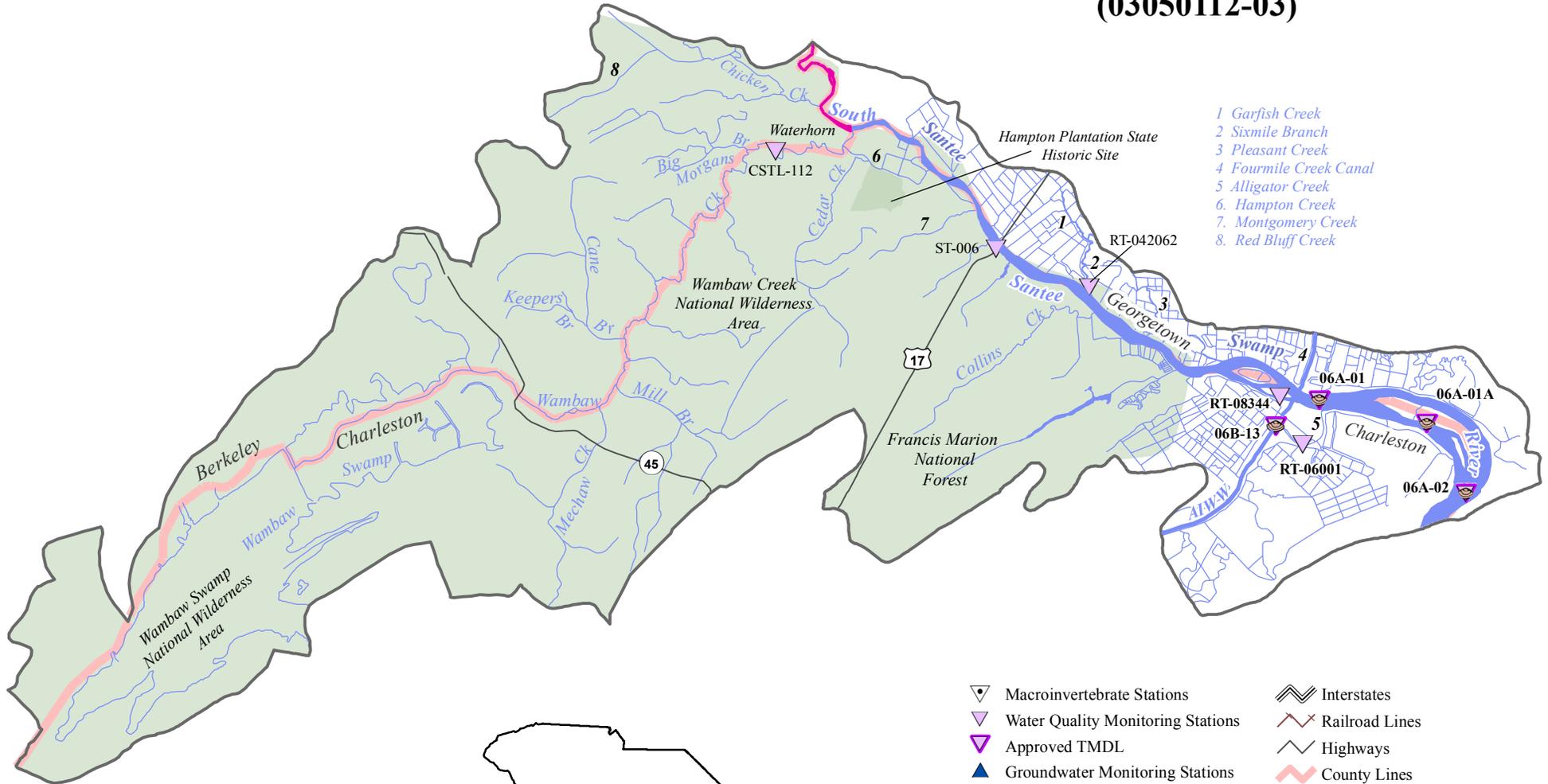
Watershed Restoration and Protection

Total Maximum Daily Loads (TMDLs)

Shellfish fecal coliform TMDLs were calculated by SCDHEC and approved by the USEPA for the **South Santee River watershed**. Shellfish monitoring stations within Shellfish Management Areas 06A and 06B have been impaired due to exceedances of fecal coliform bacteria and these impaired stations were included on the 2008 303(d) list of impaired waters. Due to these exceedances, Shellfish Management Areas 06A and 06B have been closed for shellfish harvesting. There are no wastewater treatment plants within the watershed. There are wastewater treatment facilities upstream of the watershed, but all are not considered as potential sources due to treatment levels, distance and other factors. SCDOT is the only designated Municipal Separate Storm Sewer System (MS4) in the watershed. The probable sources of the fecal coliform bacteria are large populations of waterfowl and wildlife. These TMDLs require reductions in loading of fecal coliform bacteria ranging from 1 to 84%. For more detailed information on TMDLs, please visit www.scdhec.gov/tmdl.

South Santee River Watershed

(03050112-03)



- 1 Garfish Creek
- 2 Sixmile Branch
- 3 Pleasant Creek
- 4 Fourmile Creek Canal
- 5 Alligator Creek
- 6 Hampton Creek
- 7 Montgomery Creek
- 8 Red Bluff Creek

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|-----------------------------------|---------------------------|
| Macroinvertebrate Stations | Interstates |
| Water Quality Monitoring Stations | Railroad Lines |
| Approved TMDL | Highways |
| Groundwater Monitoring Stations | County Lines |
| Special Study Stations | Modeled Stream |
| Shellfish Monitoring Stations | Stream |
| Mines | Wetland |
| Landfills | Lake |
| NPDES Permits | 10-Digit Hydrologic Units |
| Land Application Permits | Cities/Towns |
| Natural Swimming Areas | Public Lands |

