# 03060109-01 (Savannah River)

#### **General Description**

The South Carolina portion of watershed 03060109-01 (formerly 03060109-020, 03060109-050) is located in Allendale, Hampton, and Jasper Counties and consists primarily of the *Savannah River* and its tributaries from the Brier Creek Landing to Ebenezer Creek, Georgia. This Savannah River watershed extends into Georgia. There are 214,057 acres in this extended watershed; 98,308 acres or 45.9% are outside of South Carolina. The South Carolina portion is within the Lower Coastal Plain and Coastal Zone physiographic regions. Land use/land cover in the South Carolina portion of the watershed includes: 45.7% forested land, 34.5% forested wetland (swamp), 14.3% agricultural land, 2.7% urban land, 1.4% nonforested wetland (marsh), and 1.2% water. A map depicting this watershed is found in Appendix C, page C-40.

This section of the Savannah River accepts drainage from Brier Creek\*, Buck Creek\*, Cutoff No.10, Ware Creek, Limestone Branch\*, Cutoff No. 9, Clear Water Creek (Dry Gall Branch, Long Branch, Ceasars Camp Pond, Gaylord Crossing Pond, Bob Bee Tree Lake, Blake Lake, Barnes Lake, Ball Lake), and Pike Creek (Rose Bowl Pond, Long Pond, Heart Stone Pond, Calhoun Pond, Big Lake). An asterisk connotes a stream entering from the Georgia side of the river. Cornhouse Reach and Little Cornhouse Reach enter the system next, followed by Wildcat Cut, Black Creek\*, Ferry Branch\*, Hudson Ferry Reach, Rooty Branch\*, Fowl Craw Lake, and Jordan Lake. Boggy Branch (Millpond Branch, McKenzie Pond, Boggy Swamp, King Branch, Dunn Pond, Flat Lake, Bluff Lake) enters the river next followed by Hog Branch, Church Branch, Cutoff No.7A, Sisters Cut, Little Snooks Lake, Snooks Lake, Ivory Lake, Strong Creek, Plank Creek\*, Yorkley Creek, and Hungleiter Branch\*. There are a total of 521.9 stream miles and 2,053.2 acres of lake waters within this extended watershed, all classified FW.

#### **Surface Water Quality**

<u>Station #</u>	<b>Type</b>	<u>Class</u>	<b>Description</b>
SV-355	W	FW	SAVANNAH RIVER AT STOKES BLUFF LANDING OFF S-25-461
SV-369	INT	FW	SAVANNAH RIVER OFF B&C LANDING OFF S-27-201
SV-370	INT	FW	SAVANNAH RIVER, 0.2MI UPSTREAM EBENEZER CREEK

Savannah River - There are three SCDHEC monitoring stations along this portion of the Savannah River. At the upstream site (*SV-355*), aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. At the midstream site (*SV-369*), aquatic life uses are not supported due to occurrences of zinc in excess of the aquatic life chronic criterion. Although pH and dissolved oxygen excursions occurred, they were considered natural, not standards violations. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration. At the downstream site (*SV-370*), aquatic life and recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the Savannah River within this watershed (see advisory p. 111).

## **Growth Potential**

There is a low potential for growth in this watershed, which contains a portion of the Town of Scotia.

# Watershed Protection and Restoration Strategies

### Total Maximum Daily Loads (TMDLs)

Portions of the **Savannah Harbor** have been included on the Georgia 303(d) list of impaired waters as impaired for dissolved oxygen. This tidal area is considered, at times, to experience naturally occurring levels of dissolved oxygen (DO) below the Georgia standard. This naturally occurring low DO is further impacted by point source discharges both to the harbor and the Savannah River upstream of the estuarine portion of the river. In 2006, the US Environmental Protection Agency (EPA) finalized a dissolved oxygen TMDL for the system that required a 100% reduction in the loading of oxygen demanding substances being discharged to the system. This essentially required that all discharges to the system below Thurmond Dam cease discharging.

Subsequent to development of this TMDL, the State of Georgia adopted a new DO standard for the harbor. The new Georgia standards allow for a 0.1 mg/L depression in DO levels below natural conditions in naturally low DO waters. This is essentially consistent with the South Carolina standard for the waters it shares with Georgia. EPA, with assistance and input from Georgia, South Carolina and interested stakeholders, is developing a new TMDL based on the new Georgia standard. It is anticipated that the new TMDL, though very restrictive, will allow continued discharge of some oxygen demanding substances to the Savannah River and Harbor. The final TMDL is not expected until 2011.

