

**03060106-09**  
**(Savannah River)**

**General Description**

The South Carolina portion of watershed 03060106-09 (formerly 03060106-140) is located in Allendale County and consists primarily of the *Savannah River* and its tributaries from Lower Three Runs to the oxbow lake at Brier Creek Landing, Georgia. This Savannah River watershed extends into Georgia. There are 121,672 acres in this extended watershed; 54,470 acres or 44.8% are outside of South Carolina. The South Carolina portion is within the Lower Coastal Plain physiographic region. Land use/land cover in the South Carolina portion of the watershed includes: 52.0% forested land, 32.3% forested wetland (swamp), 9.7% agricultural land, 3.0% urban land, 1.4% nonforested wetland (marsh), 1.4% water. A map depicting this watershed is found in Appendix C, page C-35.

This section of the Savannah River accepts drainage from its upper reaches, together with Smith Lake Creek, Dead River Lake, Mount Lake (Spring Run), McDaniel Creek\*, Brier Creek (Stony Creek), Little Brier Creek (Warren Branch, Mars Branch), Ferguson Lake, Watch Call Branch (Bull Pond), The Gaul King Creek, Blue Lake, Pipe Creek, and Brier Creek\*. An asterisk connotes a stream entering from the Georgia side of the river. There are a total of 256.8 stream miles and 1,023.6 acres of lake waters in this extended watershed, all classified FW.

**Surface Water Quality**

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-815	SSS	FW	BRIER CREEK AT Co. Rd 53 NEAR GILL CROSSROADS
SV-814	SSS	FW	BRIER CREEK AT SC 3
SV-816	SSS	FW	STONY CREEK AT Co. Rd 53
SV-745	BIO	FW	BRIER CREEK AT S-03-102
SV-118	W	FW	SAVANNAH RIVER AT US 301, 12.5 MI SW OF ALLENDALE
SV-368	INT	FW	SAVANNAH RIVER OFF COHENS BLUFF LANDING OFF S-03-41

**Brier Creek** – There are three SCDHEC monitoring stations along Brier Creek. These are special study stations and only examined aquatic life uses. Aquatic life uses are fully supported at the upstream site (**SV-815**). Although pH excursions occurred, due to the small sample size, aquatic life uses are considered fully supported. Aquatic life uses are also fully supported at the midstream site (**SV-814**). Aquatic life uses are partially supported due to macroinvertebrate community data at the downstream site (**SV-745**).

**Stony Creek (SV-816)** – This is a special study station and only examined aquatic life uses. Aquatic life uses are fully supported. Although pH excursions occurred, due to the small sample size, aquatic life uses are considered fully supported.

**Savannah River** - There are two SCDHEC monitoring stations along this portion of the Savannah River. Aquatic life and recreational uses are fully supported at the upstream site (*SV-118*); however, there is a significant increasing trend in five-day biochemical oxygen demand and a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Aquatic life and recreational uses are also fully supported at the downstream site (*SV-368*); however, there is a significant increasing trend in fecal coliform bacteria concentration.

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

## **NPDES Program**

### **Active NPDES Facilities**

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
SAVANNAH RIVER TOWN OF ALLENDALE WWTP	SC0039918 MAJOR DOMESTIC
SAVANNAH RIVER CLAIRIANT CORP./MARTIN PLT	SC0042803 MAJOR INDUSTRIAL

## **Growth Potential**

There is a low potential for growth in this watershed, which is located near the Town of Allendale. Due to growth in the Allendale-Fairfax area, the Town of Allendale's treatment facility has been expanded. Allendale County has adopted a zoning ordinance that includes River and Streamside Management Areas that restrict development within 100 feet of a river and 50 feet from perennial streams, which flow directly into the river.

## **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.

# Lower Three Runs/ Savannah River Watersheds

(03060106-07, -09)

