

## 03060106-01

(Savannah River/Stevens Creek Reservoir)

### General Description

The South Carolina portion of watershed 03060106-01 (formerly 03060106-030) is located in Edgefield and Aiken Counties and consists primarily of the *Savannah River* and its tributaries as it flows through *Stevens Creek Reservoir* to the dam. This Savannah River watershed extends into Georgia. There are 163,361 acres in the extended watershed; 149,702 acres or 91.6% are outside of South Carolina. The South Carolina portion is within the Piedmont physiographic region. Land use/land cover in the South Carolina portion includes: 74.7% forested land, 7.9% water, 7.1% agricultural land, 5.9% forested wetland (swamp), 3.9% urban land, 0.4% barren land, and 0.1% nonforested wetland (marsh). A map depicting this watershed is found in Appendix C, page C-31.

The section of the Savannah River impounded between the Thurmond Dam and the Stevens Creek Dam forms the Stevens Creek Reservoir, which accepts drainage from its upper reaches and from Nixon Branch and Deep Step Creek. An asterisk connotes a stream entering from the Georgia side of the river. Lloyd Creek\* enters the river next, followed by Kiokee Creek\*, Little Kiokee Creek\*, Little River\*, Mauldin Branch, Deep Step Branch, and Bussy Creek. There are a total of 605.4 stream miles and 2,236.7 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-294	P	FW	STEVENS CREEK RES. HEADWATERS AT CLARKS HILL DAM BOAT RAMP

*Stevens Creek Reservoir (SV-294)* – Aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a decreasing trend in dissolved oxygen concentration. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters.

*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 US ARMY CORPS./LAKE THURMOND	SC0047317 MINOR INDUSTRIAL

## Nonpoint Source Management Program

### Land Application Sites

*LAND APPLICATION SYSTEM*  
*FACILITY NAME*

*ND#*  
*TYPE*

LAND APPLICATION  
US ARMY CORPS./LAKE THURMOND

SC0047317  
INDUSTRIAL

### Growth Potential

There is a low potential for growth in this watershed, which contains a portion of the community of Clarks Hill. The majority of the watershed resides within the Sumter National Forest and would tend to limit growth.

### Watershed Protection and Restoration Strategies

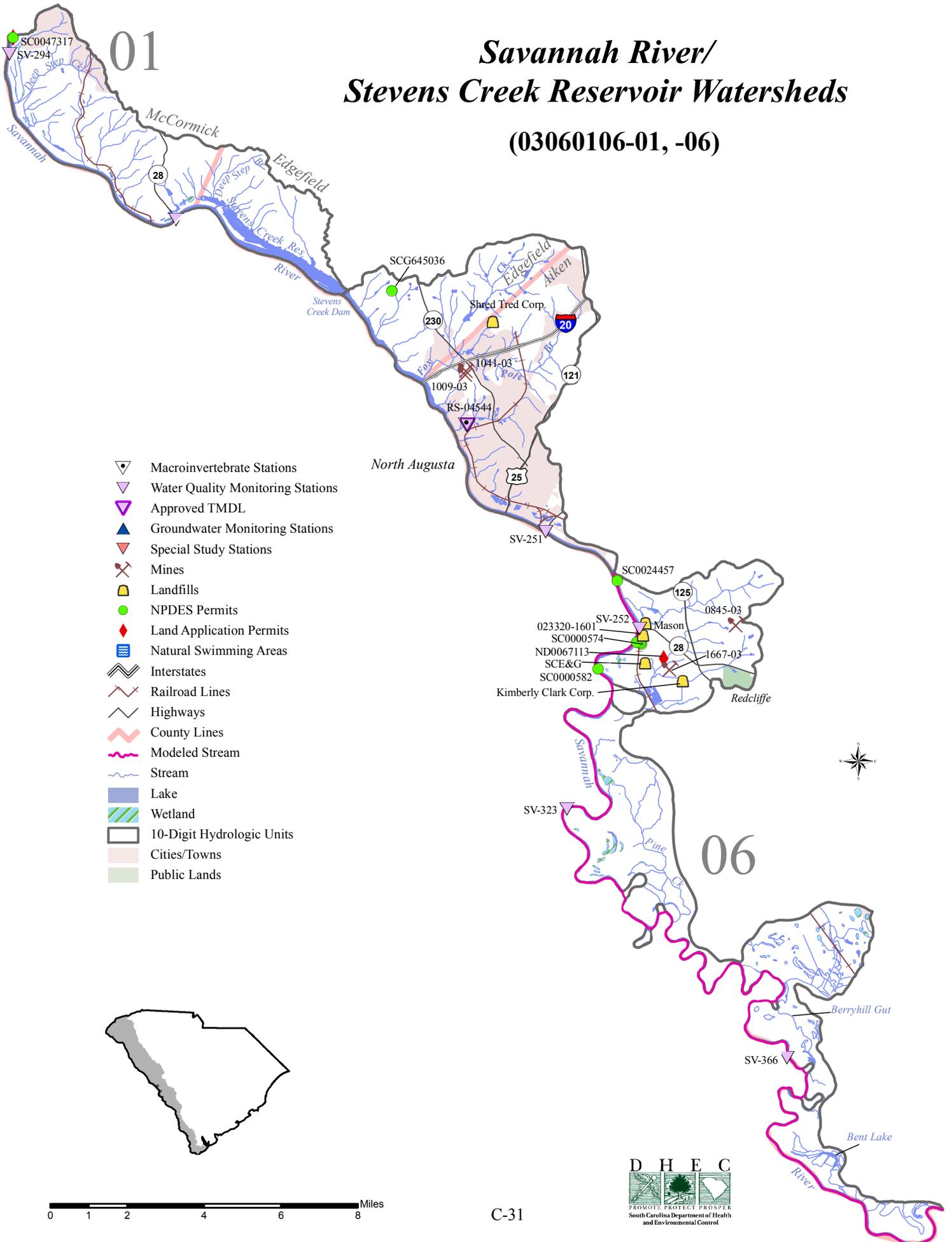
#### *Total Maximum Daily Loads (TMDLs)*

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.

# Savannah River/ Stevens Creek Reservoir Watersheds

(03060106-01, -06)



- ▽ Macroinvertebrate Stations
- ▽ Water Quality Monitoring Stations
- ▽ Approved TMDL
- ▲ Groundwater Monitoring Stations
- ▼ Special Study Stations
- ⚒ Mines
- 🗑 Landfills
- NPDES Permits
- ♦ Land Application Permits
- 🏊 Natural Swimming Areas
- 🛣 Interstates
- 🚂 Railroad Lines
- 🛣 Highways
- 🗺 County Lines
- 🌊 Modeled Stream
- 🌊 Stream
- 🟦 Lake
- 🟩 Wetland
- 📏 10-Digit Hydrologic Units
- 🏘 Cities/Towns
- 🌳 Public Lands

0 1 2 4 6 8 Miles