

03050207-01
(Salkehatchie River)

General Description

Watershed 03050207-01 (formerly 03050207-010, 020, 030) is located in Barnwell, Bamberg, and Allendale Counties and consists primarily of the *Salkehatchie River* and its tributaries from its origin to Wells Branch. The watershed occupies 168,165 acres of the Sand Hills and Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 51.3% forested land, 24.4% agricultural land, 17.7% forested wetland, 5.3% urban land, 0.7% nonforested wetland, 0.4% water and 0.2% barren land. A map depicting this watershed is found in Appendix A, page A-11.

Rosemary Creek (Folk Pond) and Buck Creek (Bolen Pond) join to form the Salkehatchie River, which accepts drainage from Turkey Creek (Shrub Branch, Long Branch, Lake Edgar A. Brown), Pen Branch (Fuller Pond), Hurricane Creek (Riley Mill Branch), Toby Creek (Jordan Branch), Parker Branch, Hercules Creek, Georges Creek (Juniper Creek), Birds Branch (Horsepen Bay, Chitty Pond), and Wells Branch. There are a total of 302.2 stream miles and 1,351.9 acres of lake waters in this watershed, all classified FW. Barnwell State Park resides near the headwaters of Toby Creek, just south of the Town of Blackville.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
CSTL-028	INT	FW	SALKEHATCHIE RIVER AT SC 64, 2MI W OF BARNWELL
RL-06437	RL06	FW	LAKE EDGAR BROWN, 0.3 MI NNE OF BRIDGE AT S-06-488
CL-064	W	FW	LAKE EDGAR BROWN IN FOREBAY NEAR DAM
CSTL-001B	INT	FW	TURKEY CREEK 1MI BELOW MILLIKEN/BARNWELL OUTFALL AT CLINTON ST.
CSTL-003	W	FW	SALKEHATCHIE RIVER AT SC 278, 2.5MI S OF BARNWELL
CSTL-577	BIO	W	TOBY CREEK AT S-06-29
CSTL-579	BI	FW	BIRDS BRANCH AT S-05-567
RS-02472	R	FW	WELLS BRANCH AT SC 300

Salkehatchie River – There are two SCDHEC monitoring stations along this portion of the Salkehatchie River. Recreational uses are partially supported at both sites due to fecal coliform bacteria excursions. At the upstream site (**CSTL-028**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. At the downstream site (**CSTL-003**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter.

Lake Edgar Brown – There are two SCDHEC monitoring stations along Lake Edgar Brown. At the uplake site (**RL-06437**), aquatic life and recreational uses are fully supported. At the downlake site

(CL-064), aquatic life uses are not supported due total phosphorus concentration and chlorophyll excursions. Recreational uses are fully supported.

Turkey Creek (CSTL-001B) – Aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Toby Creek (CSTL-577) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Birds Branch (CSTL-579) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Wells Branch (RS-02472) - Aquatic life uses are fully supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
TURKEY CREEK MILLIKEN & CO./BARNWELL PLT	SC0003093 MAJOR INDUSTRIAL
SALKEHATCHIE RIVER CITY OF BARNWELL WWTP	SC0047872 MAJOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Land Application Sites

<i>LAND APPLICATION SYSTEM FACILITY NAME</i>	<i>ND# TYPE</i>
SPRAYFIELD ND0063061 WILLISTON/ROSEMARY CREEK WWTP DOMES	TIC

Landfill Facilities

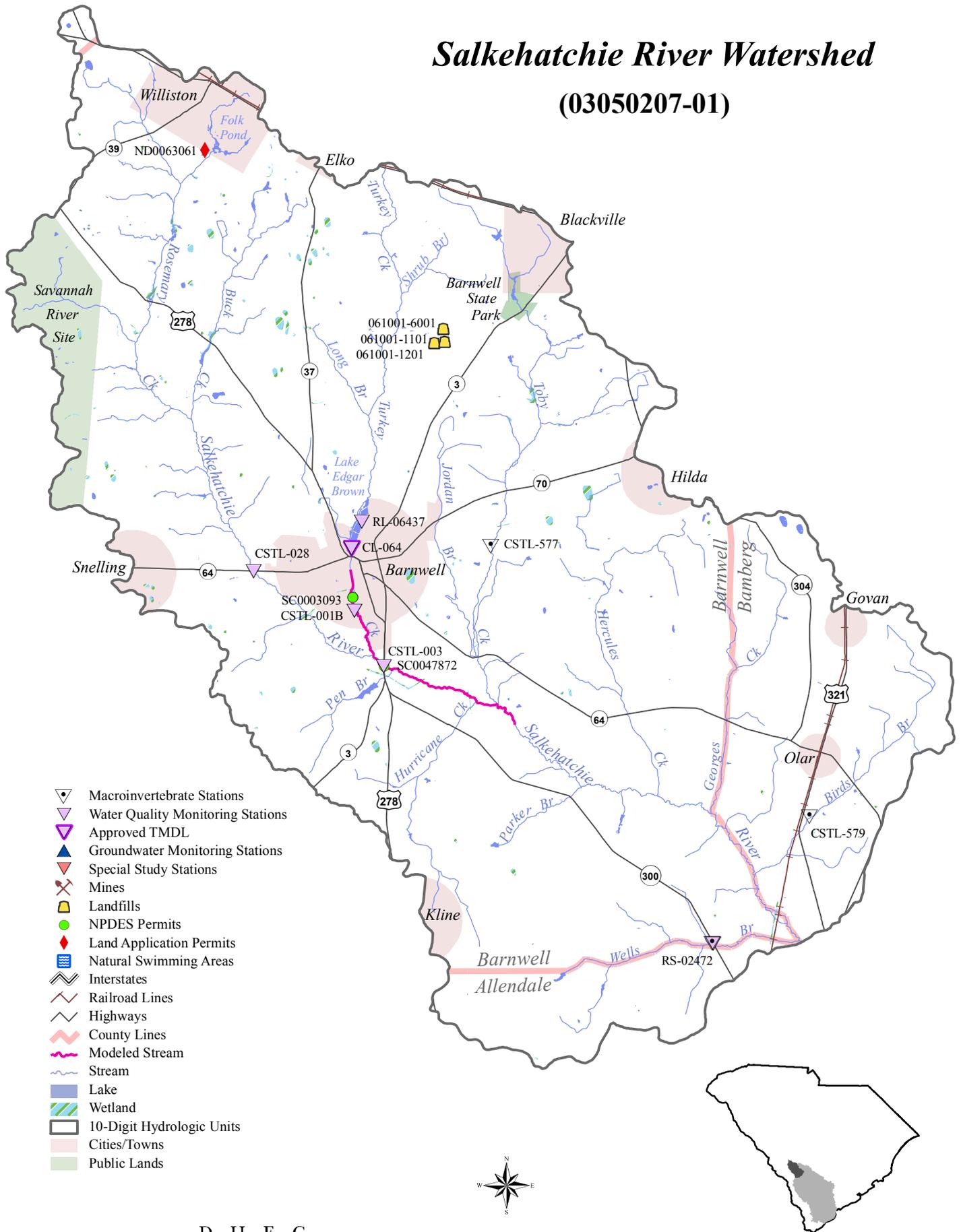
<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
BARNWELL CO. TRANSFER STA. TRANSFER STA. ACTIVE	061001-6001
BARNWELL COUNTY LANDFILL DOMESTIC INACTIVE	061001-1101

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Town of Olar, portions of the Towns of Snelling, Elko, Williston, Blackville, Hilda, Govan, and Kline, the City of Barnwell, and the Savannah River Site (SRS). The Town of Snelling is located directly adjacent to SRS where SC 64 terminates at a controlled access/employee entrance to SRS. The Town of Snelling and the area adjacent to SC 64 (including a portion of Barnwell) are expected to continue experiencing slight growth due to their location to SRS's entrance. The junction of SC 64 and US 278, en route to SRS, is an area of potential commercial growth. There are plans and funding in place to create 6-ft paved shoulders for safety and bicycle lanes along US 78 between Bamberg and Denmark. The existing rail lines running through the Town of Blackville may encourage industrial growth. Bamberg and Allendale Counties have adopted a zoning ordinance that includes River and Streamside Management Areas restricting development within 100 feet of a river and 50 feet from perennial streams, which flow directly into the river.

Salkehatchie River Watershed

(03050207-01)



- ▼ 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

