

03050109-02
(South Saluda River)

General Description

Watershed 03050109-02 (formerly 03050109-020, 030) is located in Pickens and Greenville Counties and consists primarily of the **South Saluda River** and its tributaries. The watershed occupies 109,617 acres of the Blue Ridge and Piedmont regions of South Carolina. Land use/land cover in the watershed includes: 83.9% forested land, 9.6% agricultural land, 4.8% urban land, 0.6% water, 0.6% forested wetland (swamp), and 0.5% barren land.

The South Saluda River flows through Table Rock Reservoir and is joined by several tributaries before merging downstream with the North Saluda River. The headwaters of the South Saluda River accepts drainage from Laurel Creek (Big Spring Creek, Rock Laurel Branch) and Flat Rock Creek before entering Table Rock Reservoir. Slicking Creek (Little Table Rock Creek, Chestnut Cove) and Galloway Branch flow directly into the reservoir. Matthews Creek (Julian Creek) enters the South Saluda River below the reservoir followed by West Fork (Wattacoo Creek, Robinson Branch), Tall Pines Lakes, Duck Creek, and the Oolenoy River. Tributaries of the Oolenoy River include Willis Creek, Emory Creek, Rachael Creek, Mill Creek, Carrick Creek (Green Creek, Pinnacle Lake, Oolenoy Lake), Adams Creek (Molly Branch), Weaver Creek (Burgess Creek, Cisson Creek), Hawk Creek, and Gowens Creek. Downstream from the Oolenoy River, the South Saluda River accepts drainage from Spain Creek, the Middle Saluda River, Peters Creek, and Carpenters Creek before draining into the Saluda River. The most predominant tributary to the South Saluda River is the Middle Saluda River, which originates in Caesars Head State Park and accepts drainage from Lake Rotary, Coldspring Branch, Cox Camp Creek, Rock Branch, Buck Hollow, and Head Foremost Creek. Gap Creek (Falls Creek, Trammell Lake, Friddle Lake, Bluff Branch, Tankersly Branch, Peters Branch, Cherry Branch) enters the Middle Saluda River next followed by Oil Camp Creek, Jane Branch, Devils Fork Creek, Cox Creek (Grissom Branch), Mill Creek, Wolf Creek, and Spout Spring Branch.

The South Saluda River is classified ORW from its headwaters through and including Table Rock Reservoir to the dam, classified TGPT from the dam to Hwy 8, and beyond that point classified FW. Julian Creek is classified ORW. Matthews Creek is classified ORW from its headwaters to the end of State land in the Mountain Bridge area, and classified TN from that point to its confluence with the South Saluda River. The South Saluda River is classified TPGT from the Table Rock Reservoir dam to the crossing of S.C. Hwy 8. Willis Creek and Emory Creek are classified ORW from their headwaters to the northern boundary of Table Rock Resort property, and from that point to its confluence with the Oolenoy River are classified TN. The Oolenoy River is classified TPGT from its headwaters to Emory Creek and FW beyond that point. Green Creek and the headwaters of Carrick Creek through and including Pinnacle Lake are classified ORW. The Middle Saluda River, from its headwaters to the end of State land at Jones Gap State Park is classified ORW, from that point to Oil Camp Creek is classified TN. Oil Camp Creek is classified ORW from its headwaters to the end of State land, and the remainder of the stream is classified TN. Coldspring Branch and Head Foremost Creek are classified ORW, and Falls Creek is ORW from its headwaters to Lake Trammell. Lake Trammell and the remainder of Falls Creek are classified TN. The entire reach of Gap Creek, together

with Cox Camp Creek, Rock Branch, and Buck Hollow are classified TN, and the Middle Saluda River is classified TN from the end of State land to Oil Camp Creek.

There are a total of 417.5 stream miles and 693.2 acres of lake waters in this watershed. With the exception of the ORW, TN, and TGPT streams mentioned above, the remaining streams are classified FW. Other natural resource areas in this watershed include Table Rock State Park, Caesars Head State Park, and Jones Gap State Park. A five-mile segment of the Middle Saluda River is protected under the South Carolina Scenic Rivers Program. Table Rock Reservoir is used for municipal purposes only by the Greenville Water Commission.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-291	W	ORW	TABLE ROCK RESERVOIR AT WATER INTAKE
S-320	W	TPGT	SOUTH SALUDA RIVER AT S-39-113 (TABLE ROCK ROAD)
S-086	BIO	TN	MATTHEWS CREEK AT S-23-90
S-771	BIO	FW	SOUTH SALUDA RIVER AT SC ROUTE 11
S-087	W	FW	SOUTH SALUDA RIVER AT S-23-101
RL-02307	RL02	FW	LAKE OOLENOY, SAMPLED FROM SOUTH SIDE OF SC 11 BRIDGE
S-798	W	FW	LAKE OOLENOY AT DRAIN NEAR SPILLWAY AT SC 11
RS-02330	RS02	FW	ADAMS CREEK AT UNPAVED RD FROM SC 8 AND END OF S-39-34
S-103	INT/BIO	FW	OOLENOY RIVER AT S-39-47
S-076	BIO	ORW	MIDDLE SALUDA RIVER AT JONES GAP STATE PARK
S-077	W	TN	MIDDLE SALUDA RIVER AT S-23-41
S-317	BIO	TN	OIL CAMP CREEK AT S-23-097
RS-04530	RS04/BIO	FW	MIDDLE SALUDA RIVER AT S-23-97
S-252	W	FW	MIDDLE SALUDA RIVER AT SC 288, 2.3 MILES WSW SLATER
S-980	BIO	FW	CARPENTER CREEK AT PACE BRIDGE RD NE OF SC 186/SC 135 INTERSECTION
S-299	INT	FW	SOUTH SALUDA RIVER AT SC 186

Table Rock Reservoir (S-291) - Aquatic life and recreational 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 increasing trend in dissolved oxygen concentration and a decreasing trend in fecal coliform bacteria concentration suggest improving conditions for these parameters.

South Saluda River - There are four SCDHEC monitoring stations along the South Saluda River. At the furthest upstream site (**S-320**), aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Further downstream (**S-771**), aquatic life uses are fully supported based on macroinvertebrate community data. At the next site downstream (**S-087**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. At the furthest downstream site (**S-299**), aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. Significant increasing trends in dissolved oxygen concentration and decreasing trends in

total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Matthews Creek (S-086) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Lake Oolenoy - There are two SCDHEC monitoring stations along Lake Oolenoy (**RL-02307, S-798**). Aquatic life and recreational uses are fully supported at both sites; however, there is a significant increasing trend in five-day biochemical oxygen demand at the downstream site (**S-798**). A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter at the downstream site.

Adams Creek (RS-02330) - Aquatic life and recreational uses are fully supported.

Oolenoy River (S-103) - Aquatic life uses are partially supported based on macroinvertebrate community data. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration and significant increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Middle Saluda River – There are four SCDHEC monitoring stations along the Middle Saluda River. Aquatic life use at the furthest upstream site (**S-076**) is fully supported based on macroinvertebrate community data. At the next station downstream (**S-077**), aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Further downstream (**RS-04530**), aquatic life and recreational uses are fully supported based on macroinvertebrate community data. At the furthest downstream site (**S-252**), 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. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Oil Camp Creek (S-317) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Carpenter Creek (S-980) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Natural Swimming Areas

FACILITY NAME	PERMIT #
RECEIVING STREAM	STATUS
CAMP GREENVILLE	23-N11
MIDDLE SALUDA RIVER TRIBUTARY	ACTIVE

PALMETTO BIBLE CAMP FRIDDLE LAKE/FALLS CREEK	23-N22 ACTIVE
CAMP WABAK GAP CREEK	23-N07 ACTIVE
AWANITA VALLEY MIDDLE SALUDA RIVER	23-N06 ACTIVE
WESLEYAN CAMP PINNACLE LAKE	39-N01 ACTIVE
TABLE ROCK STATE PARK MILL CREEK	39-N06 ACTIVE

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-108	GB	PIEDMONT BEDROCK	CAESAR'S HEAD
AMB-071	GB	SAPROLITE	PICKENS SHALLOW
AMB-082	GB	PIEDMONT BEDROCK	PICKENS DEEP

All water samples collected from ambient monitoring wells **AMB-086**, **AMB-071**, and **AMB-082** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
SOUTH SALUDA RIVER MILLIKEN & CO./GAYLEY PLANT	SC0003191 MAJOR INDUSTRIAL
MATTHEWS CREEK ASBURY HILLS CAMP & RETREAT	SC0029742 MINOR DOMESTIC
CARRICK CREEK SCDPRT/TABLE ROCK STATE PARK	SC0024856 MINOR DOMESTIC
SOUTH SALUDA RIVER B&B SAND/MARIETTA MINE	SCG730273 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

<i>RECEIVING STREAM MUNICIPALITY RESPONSIBLE PARTY IMPLEMENTING PARTY</i>	<i>NPDES# MS4 PHASE MS4 SIZE</i>
SOUTH SALUDA RIVER ----- GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE I MEDIUM MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i>	<i>PERMIT #</i>
<i>FACILITY TYPE</i>	<i>STATUS</i>
JAMES OWENS LCD LANDFILL	232758-1701
C&D	ACTIVE

Mining Activities

<i>MINING COMPANY</i>	<i>PERMIT #</i>
<i>MINE NAME</i>	<i>MINERAL</i>
HENDRIX SAND COMPANY	0717-77
HENDRIX MINE	SAND
INSTREAM DREDGING (SOUTH SALUDA RIVER)	
B&B SAND	0640-77
MARIETTA MINE #1	SAND

Water Quantity

<i>WATER USER</i>	<i>REGULATED CAPACITY (MGD)</i>
<i>WATERBODY</i>	<i>PUMPING CAPACITY (MGD)</i>
GREENVILLE WATER SYSTEM	45.0
TABLE ROCK RESERVOIR	30.0

Growth Potential

There is an overall low potential for development or intensive agriculture in this watershed, however; there is a high potential for low density residential and tourist commercial development where Scenic SC Hwy. 11 crosses the watershed. Several small residential subdivisions have been constructed, and wastewater disposal for these new areas are by septic tanks. The watershed is predominately protected as park and forest by Caesars Head and Table Rock State Parks. The primary uses of the watershed are recreation and preservation; however, some relatively small clear and selective cut timber harvesting activities occur on the private land holdings. US 276 crosses the watershed, but very little development occurs along the thoroughfare to North Carolina.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

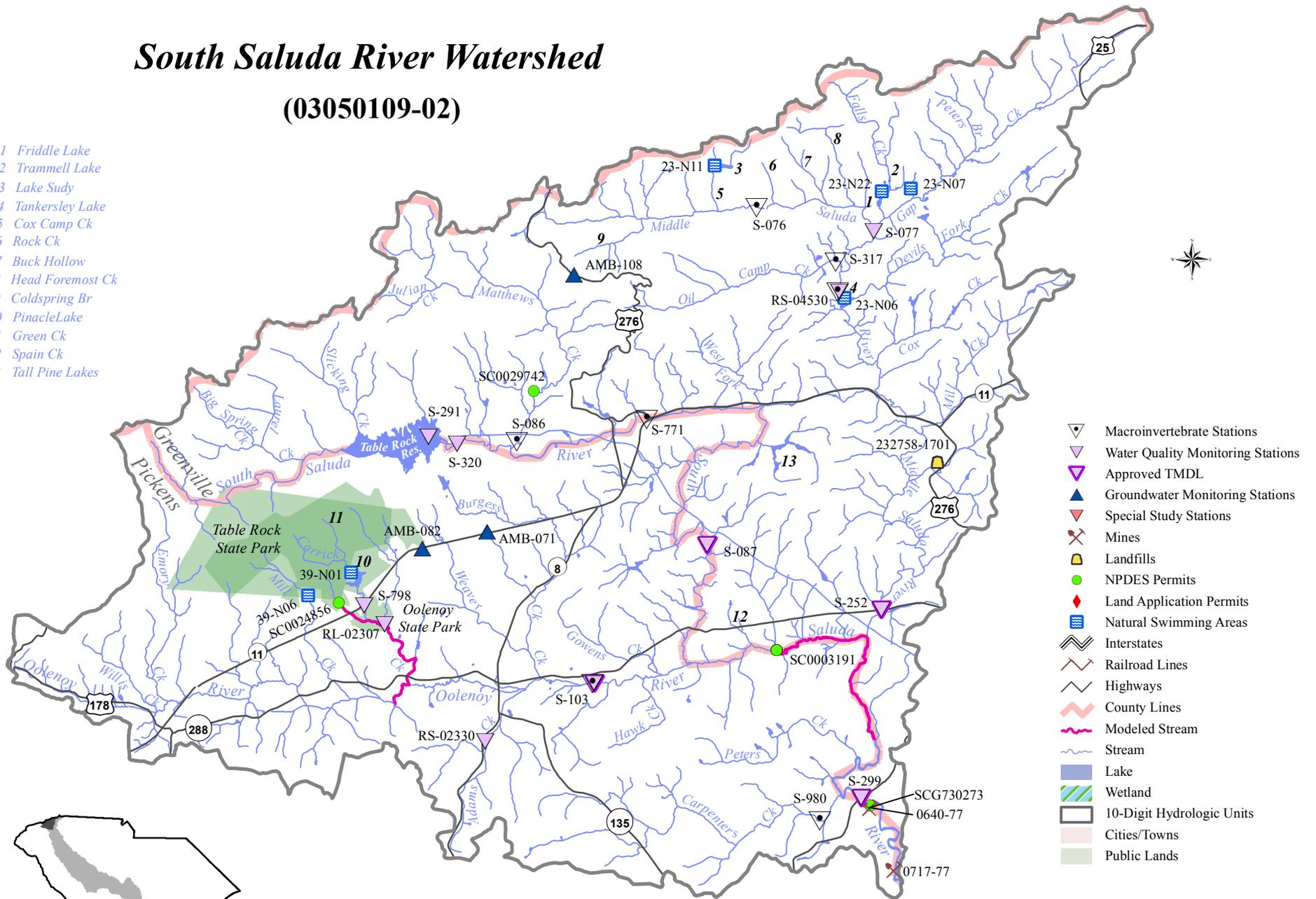
TMDLs were developed for SCDHEC and approved by EPA for the **South Saluda River and the Middle Saluda River** at water quality monitoring sites S-087, S-252, and S-299. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There were two permitted NPDES facilities that are permitted to discharge fecal coliform bacteria in this watershed. All of the Middle Saluda River watershed and most of the South Saluda River watershed have been designated as MS4s. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDLs require reductions of 32% to 69% in fecal coliform loading for these streams to meet the recreational use standard.

A TMDL was developed for SCDHEC and approved by EPA for the **Oolenoy River** at water quality monitoring site S-103. There was one permitted NPDES facility that is permitted to discharge fecal coliform bacteria in this watershed. No part of this watershed has been designated as a MS4. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDL requires a reduction of 69% in fecal coliform loading for this stream to meet the recreational use standard.

South Saluda River Watershed

(03050109-02)

- 1 Friddle Lake
- 2 Trammell Lake
- 3 Lake Sudy
- 4 Tankersley Lake
- 5 Cox Camp Ck
- 6 Rock Ck
- 7 Buck Hollow
- 8 Head Foremost Ck
- 9 Coldspring Br
- 10 Pinnacle Lake
- 11 Green Ck
- 12 Spain Ck
- 13 Tall Pine Lakes



- 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

