

03050109-05
(Rabon Creek)

General Description

Watershed 03050109-05 (formerly 03050109-130) is located in Greenville and Laurens Counties and consists primarily of **Rabon Creek** and its tributaries from its origin to Lake Greenwood. The watershed occupies 81,531 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 52.7% forested land, 35.0% agricultural land, 7.9% urban land, 2.3% forested wetland (swamp), 1.4% water, and 0.7% barren land.

South Rabon Creek (Payne Branch, Bullit Branch) and North Rabon Creek (Stoddard Creek, Pumpkin Branch, Mountain Creek, Lick Creek) originate near the Town of Fountain Inn, and join together to form Lake Rabon near the City of Laurens. Rabon Creek (Dirty Creek, Burriss Creek) flows out of the Lake Rabon dam to form an arm of Lake Greenwood further downstream. There are a total of 293.3 stream miles and 414.9 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-859	BIO	FW	MOUNTAIN CREEK AT SR 32
S-321	W	FW	NORTH RABON CREEK AT S-30-32
RL-05411	RL05	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.8 MI UPSTREAM FROM DAM
S-313	W	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.5 MI UPSTREAM OF DAM
RL-02303	RL02	FW	LAKE RABON, NEAR NE SHORE AND BELOW US 76
S-860	BIO	FW	SOUTH RABON CREEK AT SR 77
S-322	W	FW	SOUTH RABON CREEK ON DIRT ROAD BETWEEN SC 101 & S-30-76
S-312	W	FW	LAKE RABON, SOUTH RABON CREEK ARM, AT S-30-312
RL-03359	RL03	FW	LAKE RABON, 0.6 MI SE OF S-30-312
RL-02305	RL02	FW	LAKE RABON, NEAR BOAT LANDING ON UNNAMED CO. RD OFF S-30-54
S-296	SUMM	FW	LAKE RABON, 300 FEET UPSTREAM OF DAM
S-096	INT/BIO	FW	RABON CREEK AT S-30-54, 8.8 MILES NW OF CROSS HILL
S-307	W	FW	LAKE GREENWOOD, RABON CREEK ARM, 0.8 KM N OF S-30-307

Mountain Creek (S-859) – Aquatic life uses are fully supported based on macroinvertebrate community data.

North Rabon Creek (S-321) – 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 not supported due to fecal coliform bacteria excursions.

North Rabon Creek Arm of Lake Rabon – There are two SCDHEC monitoring stations along the North Rabon Creek Arm of Lake Rabon (**RL-05411, S-313**) and aquatic life and recreational uses are fully supported at both sites.

Lake Rabon - Lake Rabon is a 537-acre impoundment on Rabon Creek, with a maximum depth of approximately 27.2 feet and an average depth of approximately 13.1 feet. The lake's watershed comprises 89.7 square miles. There are four SCDHEC monitoring stations along Lake Rabon

(RL-02303, RL-03359, RL-02305, S-296) and aquatic life and recreational uses are fully supported at all sites; however, there is a significant increasing trend in five-day biochemical oxygen demand at S-296. There is a significant increasing trend in pH. Although pH excursions occurred at this site, they were considered natural, not standards violations. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. *Fish tissue analyses on species caught from Lake Rabon indicate no advisories or restrictions on consumption of fish from these waters.*

South Rabon Creek – There are two SCDHEC monitoring stations along South Rabon Creek. At the upstream site (*S-860*), aquatic life uses are fully supported based on macroinvertebrate community data.

At the downstream site (*S-322*), 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 due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

South Rabon Creek Arm of Lake Rabon (S-312) – Aquatic life and recreational uses are fully supported. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

Rabon Creek (S-096) – Aquatic life are fully supported based on macroinvertebrate community data; 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. Recreational uses are fully supported.

Rabon Creek Arm of Lake Greenwood (S-307) - Aquatic life and recreational uses are fully supported. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters.

NPDES Permitted Activities

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
MOUNTAIN CREEK FIBERWEB INC./GRAY COURT	SCG250208 MINOR INDUSTRIAL
PAYNE BRANCH TRIBUTARY KS GLEITLAGER USA, INC.	SCG250220 MINOR INDUSTRIAL
MOUNTAIN CREEK S & S WASHERETTE	SC0032298 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>MUNICIPALITY</i>	<i>MS4 PHASE</i>
<i>RESPONSIBLE PARTY</i>	<i>MS4 SIZE</i>
<i>IMPLEMENTING PARTY</i>	<i>COUNTY</i>
RABON CREEK ----- GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE I MEDIUM MS4
RABON CREEK UNINCORPORATED AREAS GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE I MEDIUM MS4
RABON CREEK CITY OF FOUNTAIN INN GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE II SMALL MS4 GREENVILLE
RABON CREEK CITY OF SIMPSONVILLE GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE II SMALL MS4
RABON CREEK CITY OF FOUNTAIN INN GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE II SMALL MS4 LAURENS

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i>	<i>PERMIT #</i>
<i>FACILITY TYPE</i>	<i>STATUS</i>
TRI CITY SERVICE INDUSTRIAL	----- INACTIVE
CURRY LAKE C&D LANDFILL C&D	302693-1201 ACTIVE
RUBBER RECYCLING TECH./WASTE TIRE PROC. WTP	232784-5201 ACTIVE

Water Quantity

<i>WATER USER</i>	<i>REG. CAPACITY (MGD)</i>
<i>STREAM</i>	<i>PUMPING CAPACITY (MGD)</i>
CITY OF LAURENS CPW LAKE RABON	9.3 17.3
CITY OF LAURENS CPW RABON CREEK	2.0 5.0

Growth Potential

This watershed contains portions of the Cities of Simpsonville, Fountain Inn, and Laurens and the Town of Gray Court. There is an increasing potential for growth along the I-385 corridor in the eastern portion of this watershed near the greater Laurens area. Many residential subdivisions and industrial sites are being constructed. Agricultural and silvicultural activities are prevalent in the western and central portion of the watershed. US 76 crosses Lake Rabon and the watershed en route to Laurens.

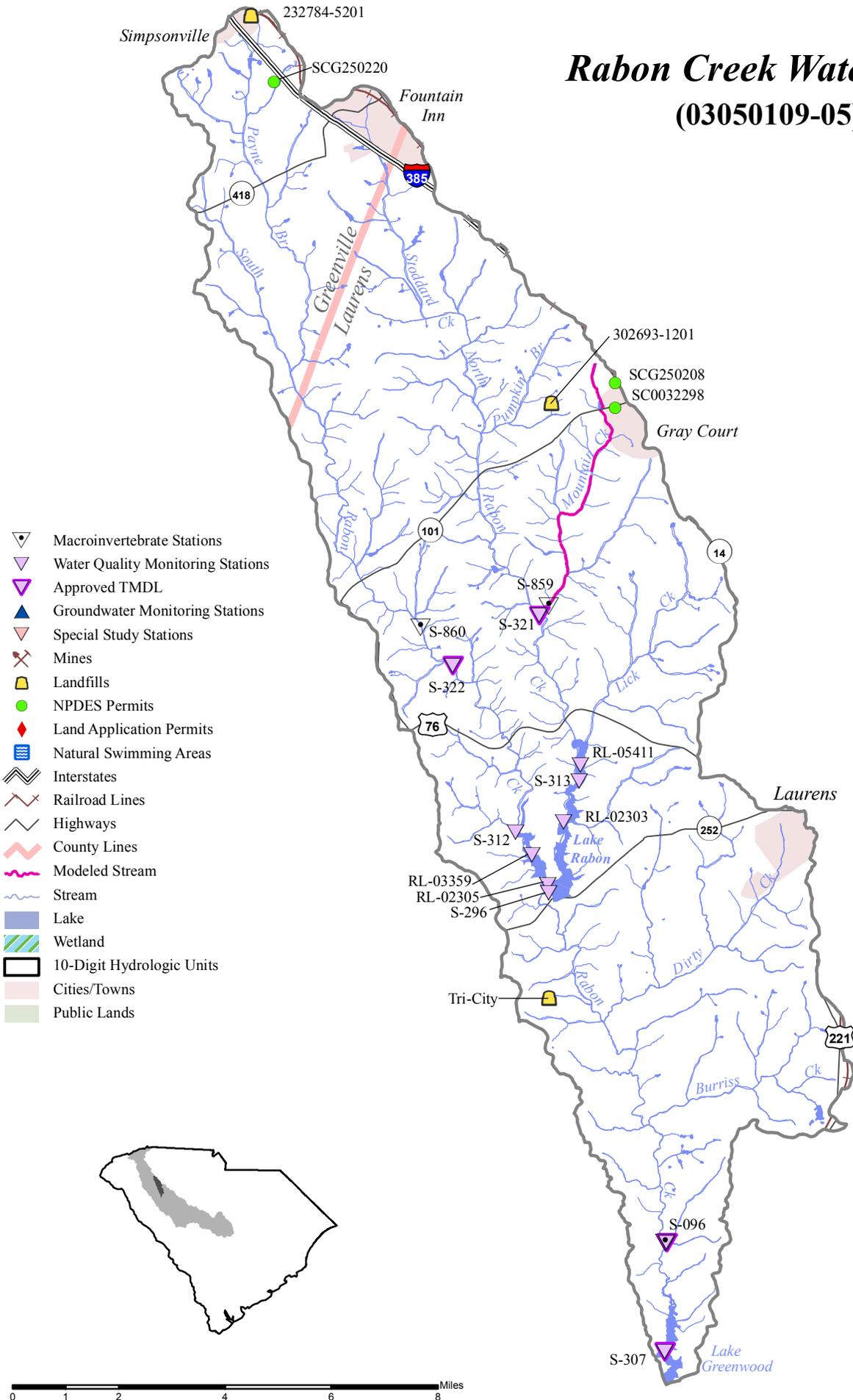
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for **Rabon Creek** at water quality monitoring sites S-096, S-307, S-321, and S-322. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There was one permitted wastewater treatment facility located on Mountain Creek, a tributary of North Rabon Creek. A small part of the 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 TMDLs require reductions of 3% to 65% in fecal coliform loading for this stream to meet the recreational use standard.

The nonpoint source component of the Rabon Creek TMDL is currently being implemented using §319 grant funds. Implementation was completed in November 2010. For more information on §319 grants, visit <http://www.scdhec.gov/environment/water/grants.htm#319>.

Rabon Creek Watershed (03050109-05)



- ▽ 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

