

## 03060103-05

### (Little River)

#### General Description

Watershed 03060103-05 (formerly 03060103-140 minus the impounded Lake Thurmond arm) is located in Anderson, Abbeville, and McCormick Counties and consists primarily of **Little River** and its tributaries to Lake Thurmond. The watershed occupies 207,276 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 58.2% forested land, 31.9% agricultural land, 6.3% urban land, 2.5% forested wetland (swamp), 0.7% barren land, and 0.4% water. A map depicting this watershed is found in Appendix B, page B-23.

Barkers Creek (Blue Barker Creek, Long Branch) and Corner Creek join to form the Little River, which then accepts drainage from Camp Creek, Hogskin Creek (Long Branch, Little Hogskin Creek), Chickasaw Creek, Spur Creek (Johnson Creek, Blacks Creek), Park Creek (Reids Creek), and Cochran Branch (Tanyard Branch). Penny Creek enters the river next, followed by Shanklin Creek, McKenley Creek (Morrow Creek, Baskin Branch, Gill Creek), and Sawney Creek (Sherard Lake). Calhoun Creek originates near the City of Abbeville and accepts drainage from Reid Creek, Redd Creek, Flagreed Creek, Jim Knox Branch, White Creek (Hammond Branch, Bowie Branch, Hillbern Creek), and Hartzog Branch before draining into the Little River. Further downstream, the river accepts drainage from Lott Creek, Lee Creek, Bell Creek, Scott Creek, and Connor Creek (Cole Branch). There are a total of 754.4 stream miles and 416.5 acres of lake waters in this watershed, all classified FW. The bottom third of the watershed is within the Sumter National Forest.

#### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-164	W/BIO	FW	LITTLE RIVER AT S-01-24
SV-733	BIO	FW	HOGSKIN CREEK AT SC 184
RS-05586	RS05/BIO	FW	JOHNSON CK TRIB AT S-01-352, 6.8 MI W DUE WEST
SV-348	W	FW	LITTLE RIVER AT S-01-32
RS-02478	RS02/BIO	FW	LITTLE RIVER AT S-01-308
RS-05558	RS05	FW	MORROW CREEK AT S-01-344, 4.1 MI NE OF CALHOUN FALLS
SV-644	BIO	FW	GILL CREEK AT S-01-32
SV-052	W	FW	SAWNEY CREEK AT CO. RD 1.5 MI SE OF CALHOUN FALLS
SV-171	BIO	FW	CALHOUN CREEK AT S-01-40
SV-192	INT	FW	LITTLE RIVER AT S-33-19

**Little River** – There are four SCDHEC monitoring stations along the unimpounded portion of the Little River. At the furthest upstream sites (**SV-164**, **SV-348**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand.

Recreational uses are partially supported at these sites due to fecal coliform bacteria excursions.

Aquatic life uses are fully supported at **RS-02478** based on macroinvertebrate community data.

Recreational uses are fully supported at this site. At the furthest downstream site (**SV-192**), 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. *Fish tissue analyses on species caught from the Little River indicate no advisories or restrictions on consumption of fish from these waters.*

**Hogskin Creek (SV-733)** - Aquatic life uses are fully supported based on macroinvertebrate community data.

**Johnson Creek Tributary (RS-05586)** - Aquatic life uses are fully supported based on macroinvertebrate community data. Recreational uses are partially supported due to fecal coliform bacteria excursions.

**Morrow Creek (RS-05558)** - Aquatic life and recreational uses are fully supported.

**Gill Creek (SV-644)** - Aquatic life uses are partially supported based on macroinvertebrate community data.

**Sawney Creek (SV-052)** - Aquatic life uses are fully supported; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. Significant decreasing trends in turbidity and fecal coliform bacteria concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

**Calhoun Creek (SV-171)** - Aquatic life uses are fully supported based on macroinvertebrate community data.

## Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-054	GB	PIEDMONT BEDROCK	ABBEVILLE
AMB-075	GB	SAPROLITE	ABBEVILLE

All water samples collected from ambient monitoring wells **AMB-054** and **AMB-075** met standards for Class GB groundwater.

## NPDES Program

### Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
HILLBERN CREEK TRIBUTARY MILLIKEN & CO./SHARON PLT	SC0023477 MINOR INDUSTRIAL
SAWNEY CREEK TOWN OF CALHOUN FALLS	SC0025721 MINOR DOMESTIC

PARK CREEK  
TOWN OF DUE WEST WWTP

SC0022403  
MINOR DOMESTIC

LITTLE RIVER  
LITTLE RIVER SAND CO. MINE

SCG730555  
MINOR INDUSTRIAL

REDD CREEK  
S&S CONSTRUCTION, INC./OVERHOLT MINE

SCG731041  
MINOR INDUSTRIAL

## **Nonpoint Source Management Program**

### ***Land Disposal Activities***

#### ***Landfill Facilities***

***LANDFILL NAME***  
***FACILITY TYPE***

***PERMIT #***  
***STATUS***

CITY OF ABBEVILLE LCD&YT LANDFILL  
C&D

011002-1701  
INACTIVE

CITY OF ABBEVILLE LCD&YT LANDFILL  
C&D

011002-1702  
INACTIVE

CITY OF ABBEVILLE INERT & CELLULOSIC  
INERT

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INACTIVE

ABBEVILLE CO. SANITARY LANDFILL  
DOMESTIC

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INACTIVE

ABBEVILLE CO. SANITARY LANDFILL #2  
DOMESTIC

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INACTIVE

ABBEVILLE CO. C&D LANDFILL  
C&D

011001-1201  
ACTIVE

ABBEVILLE CO. MSW LANDFILL  
DOMESTIC

011001-1102  
ACTIVE

ABBEVILLE CO. SW LANDFILL  
DOMESTIC

011001-2001  
INACTIVE

ABBEVILLE CO. SANITARY LANDFILL  
DOMESTIC

011001-1101  
INACTIVE

ABBEVILLE CO. WOOD CHIPPING  
COMPOSTING

011001-3001  
INACTIVE

TOWN OF CALHOUN FALLS DUMP  
DOMESTIC

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INACTIVE

THRELKO INC. LCD LANDFILL  
C&D

012741-1701  
INACTIVE

HR GARRETT-DOBBINS LCD LANDFILL  
C&D

012458-1701  
ACTIVE

MH CAROLINAS LCD&YT LANDFILL  
C&D

012755-1701  
INACTIVE

### ***Mining Activities***

***MINING COMPANY***  
***MINE NAME***

***PERMIT #***  
***MINERAL***

LITTLE RIVER SAND CO.  
LITTLE RIVER SAND MINE

1406-01  
RIVER SAND

JAMES GROVES CONSTRUCTION  
LITTLE RIVER

1521-01  
SAND

### **Growth Potential**

There is a moderate potential for growth in this watershed, which contains the Town of Due West and the Willington community, portions of the Towns of Calhoun Falls and Honea Path, and the communities of Antreville and Mount Carmel. Industrial growth is projected along the US 76 corridor from Honea Path to Belton. Overall development trends are predicted to occur between Honea Path and Williamston (including Belton) along SC 20. A residential growth area lies between Lowndesville and Antreville and will be impacted by any future lakefront development in Calhoun Falls, which resides next to Sawney Creek. Calhoun Falls has upgraded their treatment system, replacing the lagoon treatment system, and are better able to support future growth. The Calhoun Falls Industrial Park is located in Calhoun Falls on SC 72 and serves as a source for future industrial growth. The City of Abbeville resides just over the eastern watershed border and affects this watershed. Sharing the same rail line is the Abbeville County Industrial Park, located on the southwest side of the City of Abbeville, another source of potential industrial growth within the watershed. The Sumter National Forest extends across the lower portion of the watershed and would limit growth in that area.

### **Watershed Protection and Restoration Strategies**

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

TMDLs were developed for SCDHEC and approved by EPA at water quality monitoring sites for the **Little River** (SV-164, SV-192, SV-348), **Sawney Creek** (SV-052), and **Calhoun Creek** (RS-01049). The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There was one major permitted wastewater treatment facility located on Sawney Creek and two small permitted NPDES facilities located on Little River. At this time there are no designated MS4s in the Little River watershed. Probable sources of fecal coliform bacteria that were identified in the watershed are grazing livestock, especially cattle watering in the creeks, failing septic systems, residential stormwater runoff, and wildlife. The TMDLs state that reductions of 30% to 69% in fecal coliform loading are necessary for these streams to meet the recreational use standard.

# Little River Watershed

(03060103-05)

- 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

011001-3001  
011001-1101  
011001-2001  
011001-1102  
011002-1702  
011002-1701

