

03050110-02

(Gills Creek)

General Description

Watershed 03050110-02 (formerly 03050110-030) is located in Richland County and consists primarily of *Gills Creek* and its tributaries. The watershed occupies 47,683 acres of the Sandhills region of South Carolina. Land use/land cover in the watershed includes: 51.0% urban land, 25.1% forested land, 13.4% agricultural land, 8.1% forested wetland (swamp), 2.1% water, and 0.3% nonforested wetland (marsh).

Gills Creek flows through the northeastern section of the City of Columbia and drains into the Congaree River. Gills Creek originates near Sesquicentennial State Park and accepts the drainage of Bynum Creek (Rose Creek), Rowell Creek, and Mack Creek before flowing through Rockyford Lake and Forest Lake. Jackson Creek also originates near Sesquicentennial State Park and flows through Sesquicentennial Pond and Windsor Lake before accepting the drainage of Little Jackson Creek (Lightwood Knot Branch). Jackson Creek then flows through Carys Lakes (Arcadia Lakes) and Spring Lake before flowing into Gills Creek in Forest Lake. Downstream of Forest Lake, Gills Creek accepts the drainage of Eightmile Branch and Pen Branch (Orphanage Branch) before flowing through Lake Katherine. Wildcat Creek (Semmes Lake, Fork Creek, Upper Legion Lake, Lower Legion Lake) drains into Gills Creek downstream of Lake Katherine. Gills Creek and its associated wetlands drain into the Congaree River. Several oxbow lakes, including Alligator Lake, drain into Gills Creek near the river. There are a total of 117.5 stream miles and 1,120.0 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>
C-068	W	FW	FOREST LAKE AT DAM
C-001	W	FW	GILLS CREEK AT BRIDGE ON US 76 (GARNERS FERRY ROAD)
C-017	INT	FW	GILLS CREEK AT SC 48 (BLUFF ROAD)

Forest Lake (C-068) – Aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter.

Gills Creek - There are two SCDHEC monitoring stations along Gills Creek. Aquatic life uses are fully supported at the upstream site (*C-001*); however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. Aquatic life uses are partially supported at the downstream site (*C-017*) due to dissolved oxygen excursions, which are

compounded by a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and total suspended solids suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

A fish consumption advisory has been issued by SCDHEC for mercury and includes Sesquicentennial State Park Lake, Carys Lake, Forest Lake, and Windsor Lake within this watershed (see advisory p.131).

Natural Swimming Areas

<i>FACILITY NAME</i>	<i>PERMIT #</i>
<i>RECEIVING STREAM</i>	<i>STATUS</i>
SESQUICENTENIAL STATE PARK	40-N16
SESQUICENTENIAL STATE PARK LAKE	ACTIVE

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-046	GB	MIDDENDORF	SPRING VALLEY

All water samples collected from ambient monitoring well **AMB-046** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>FACILITY NAME</i>	<i>NPDES#</i>	<i>TYPE</i>
GILLS CREEK	CENTRAL PRODUCTS CO. DBA IPG	SCG250180	MINOR INDUSTRIAL
JACKSON CREEK	AMPHENOL CORP.	SC0046264	MINOR INDUSTRIAL
GILLS CREEK TRIBUTARY	JORDAN CO./CONGAREE SAND PIT	SCG730269	MINOR INDUSTRIAL
LIGHTWOOD KNOT BRANCH TRIBUTARY	SCDOT/I-20 PIT	SCG730926	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

<i>RECEIVING STREAM</i>	<i>MUNICIPALITY</i>	<i>RESPONSIBLE PARTY</i>	<i>IMPLEMENTING PARTY</i>	<i>NPDES#</i>	<i>MS4 PHASE</i>	<i>MS4 SIZE</i>
GILLS CREEK	-----			SCS400001	PHASE I	MEDIUM MS4
	RICHLAND COUNTY					
	RICHLAND COUNTY					

GILLS CREEK CITY OF COLUMBIA CITY OF COLUMBIA CITY OF COLUMBIA	SCS790001 PHASE II SMALL MS4
GILLS CREEK CITY OF COLUMBIA FORT JACKSON FORT JACKSON	SCR037901 PHASE II SMALL MS4
GILLS CREEK CITY OF ARCADIA LAKES RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE II SMALL MS4
GILLS CREEK CITY OF FOREST ACRES RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE II SMALL MS4
GILLS CREEK UNINCORPORATED AREAS RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE I MEDIUM MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i> <i>FACILITY TYPE</i>	<i>PERMIT #</i> <i>STATUS</i>
ANCHOR CONTINENTAL, INC. INDUSTRIAL	----- CLOSED
ANCHOR CONTINENTAL, INC. INDUSTRIAL	----- CLOSED
INTERTAPE POLYMER GROUP (ANCHOR CONTINENTAL) INDUSTRIAL	403326-1601 ACTIVE
BALDWIN ROAD C&D DUMP C&D LANDFILL	----- CLOSED
COLUMBIA LANDFILL MUNICIPAL	----- INACTIVE
CITY OF COLUMBIA COMPOSTING FACILITY COMPOSTING	401002-3001 ACTIVE
TRAPP L/C DEBRIS & YT LANDFILL C&D LANDFILL	402468-1701 INACTIVE

Mining Activities

<i>MINING COMPANY</i> <i>MINE NAME</i>	<i>PERMIT #</i> <i>MINERAL</i>
THE JORDAN COMPANY CONGAREE SAND PIT	0545-79 SAND

Growth Potential

There is a high potential for continued growth in this urban watershed, which contains a portion of the City of Columbia. Although primarily residential, there are a substantial number of commercial and industrial areas. Almost the entire watershed, which runs through the City of Columbia, has water and sewer readily available. Growth has been steady in the Southeast Columbia area along the I-77 beltway and is expected to continue to be a strong growth corridor for residential and industrial development.

