

03050110-03
(Congaree River)

General Description

Watershed 03050110-03 (formerly 03050110-010, 040, 050) is located in Richland, Lexington, and Calhoun Counties and consists primarily of the **Congaree River** and its tributaries from its origin to Cedar Creek. The watershed occupies 232,276 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 35.8% forested land, 27.0% agricultural land, 24.4% forested wetland (swamp), 10.9% urban land, 1.5% water, 0.4% nonforested wetland (marsh), and 0.2% barren land.

The Congaree River originates with the confluence of the Saluda River Basin and the Broad River Basin in the City of Columbia. The Broad River Canal and Rocky Branch flow into the Congaree River within the City of Columbia, followed by the Congaree Creek watershed, the Gills Creek watershed, Toms Branch (Silver Lake, Geiger Pond), Big Lake (Cow Cut), and Savany Hunt Creek. The river then accepts drainage from Sandy Run (Little Sandy Run), Mill Creek (Twin Lakes, Sun View Lake, Ulmers Pond, Pinewood Lake, Adams Pond, Reeder Point Branch, Black Lake), Saylor's Lake, Dead River, Muellers Little Lake, and Muellers Big Lake. Big Beaver Creek accepts drainage from Rock Branch, Branham Branch, Little Beaver Creek (Howell Branch, Falls Branch), and Congaree Spring Branch (Hildebrand Branch) before flowing into the Congaree River. Butlers Gut Creek (Buyck Bottom Creek, Sikes Creek) connects Big Beaver Creek to the river. Bates Mill Creek (High Hill Creek, Speigner Branch, Dicks Swamp, Lords Lake) and Cedar Creek drain into the river at the base of the watershed. The headwaters of Cedar Creek flow through Westons Pond, then Harmons Pond, Morrells Pond, Clarkson Pond, and Duffies Pond before accepting the drainage of Reeves Branch and Myers Creek (Cabin Branch, Horsepen Branch, Goose Branch). After the confluence with Myers Creek, Cedar Creek flows through Wise Lake and Weston Lake and accepts drainage from Dry Branch before entering the Congaree River. There are numerous river oxbows and short stream segments that braid between Cedar Creek and the Congaree River including Horsepen Gut, Running Gut, Old Dead River Lake, Thorntree Gut, Boggy Gut, Deep Jackson Gut, and Hammond Gut.

The lower section of the watershed contains a large portion of the Congaree National Park, a floodplain forest with the largest contiguous tract of old-growth bottomland hardwoods in the United States. There are a total of 642.4 stream miles and 2,271.8 acres of lake waters in this watershed, all classified FW except within the Congaree National Park. Within the 2006 boundary of the Congaree National Park, all streams are classified ORW, with the exception of the reach of Cedar Creek from Wise Lake to the Congaree River, which is classified ONRW (Outstanding National Resource Waters). The park boundary has expanded since 2006, and the classifications of those waters within the expanded boundary will be reevaluated by SCDHEC, but are currently classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
B-080	W	FW	BROAD RIVER DIVERSION CANAL AT COLUMBIA WATER PLANT
CSB-001L	W/SSS	FW	CONGAREE RIVER AT BLOSSOM ST (SALUDA RIVER)
CSB-001R	W/SSS	FW	CONGAREE RIVER AT BLOSSOM ST (BROAD RIVER)
S-955	SSS	FW	CONGAREE RIVER AT ROSEWOOD DRIVE LANDING
S-956	SSS	FW	CONGAREE RIVER AT CAYCE WWTP OUTFALL
S-957	SSS	FW	CONGAREE RIVER AT COLUMBIA METRO WWTP OUTFALL
S-958	SSS	FW	CONGAREE RIVER AT EAST RICHLAND WWTP OUTFALL
S-994	SSS	FW	CONGAREE RIVER UPSTREAM OF CONGAREE CREEK
S-959	SSS	FW	CONGAREE RIVER AT CONGAREE CREEK MOUTH
S-960	SSS	FW	CONGAREE RIVER AT GILLS CREEK MOUTH
S-961	SSS	FW	CONGAREE RIVER AT TOMS BRANCH MOUTH
S-995	SSS	FW	CONGAREE RIVER, MIDWAY BETW DAK AMERICAS INTAKE AND OUTFALL
S-996	SSS	FW	CONGAREE R., SMALL BEND IN RIVER UPSTR OF WESTINGHOUSE OUTFALL
S-965	SSS	FW	CONGAREE RIVER AT WESTINGHOUSE INDUSTRIES OUTFALL
C-009	INT/BIO	FW	SANDY RUN AT U.S. 176
S-971	SSS	FW	SANDY RUN AT CONFLUENCE WITH CONGAREE RIVER
C-073	W	FW	REEDER POINT BRANCH AT SC 48
C-021	W	FW	MILL CREEK AT SC 262
S-967	SSS	FW	CONGAREE RIVER AT DEVRO-TEEPAK OUTFALL
C-074	INT	FW	CONGAREE RIVER -W BOUNDARY OF CONGAREE NATIONAL PARK
C-010	BIO	FW	BIG BEAVER CREEK AT US 176
C-069	SEDM/BIO	FW	CEDAR CREEK AT S-40-66
C-071	BIO	FW	CEDAR CREEK AT S-40-734
C-075	INT	FW	CEDAR CREEK S OF S-40-734 AT OLD USGS GAGING PLATFORM

Broad River Diversion Canal – Aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. 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.

Congaree River - There are fifteen SCDHEC monitoring stations along this section of the Congaree River. At special study sites **S-956, S-957, S-958, S-959, S-960, S-961, S-965, and S-967** the aquatic life use data is limited to copper data. Based on that data, all the above sites except S-967 meet the criteria for copper and support the standards. Special study site **S-967** does not meet those copper standards. Only fecal coliform was sampled at special study sites **CSB-001R, CSB-001L, S-955, S-994, S-995, and S-996**. At CSB-001R and CSB-001L (stationed along the right and left banks of the headwaters of the Congaree River), recreational uses are partially supported due to fecal coliform bacteria excursions; however, significant decreasing trends in fecal coliform bacteria concentration suggest improving conditions for this parameter. All the remaining downstream special study sites fully support recreational uses. At the furthest downstream site (**C-074**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a decreasing trend in dissolved oxygen concentration. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Sandy Run – There are two SCDHEC monitoring stations along Sandy Run. This is a blackwater system, characterized by naturally low pH conditions. At the upstream site (**C-009**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical

oxygen demand. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. The downstream site (*S-971*) is a special study site with aquatic life use data limited to copper data. Based on that data, the S-971 meets the criteria for copper and supports the standards.

Reeder Point Branch (C-073) – Aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Mill Creek - Aquatic life uses are fully supported. 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 total phosphorus concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. 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.

Big Beaver Creek (C-010) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Cedar Creek – There are three SCDHEC monitoring stations along Cedar Creek. This is a blackwater system, characterized by naturally low pH conditions. At the upstream site (*C-069*), aquatic life uses are fully supported based on macroinvertebrate community data. A significant decreasing trend in turbidity suggests improving conditions for this parameter. At the midstream site (*C-071*), aquatic life uses are partially supported based on macroinvertebrate community data. Aquatic life and recreational uses are fully supported at the downstream site (*C-075*); however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand.

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.

A fish consumption advisory has been issued by SCDHEC for mercury and includes portions of streams within this watershed (see advisory p.131).

Natural Swimming Areas

***FACILITY NAME
RECEIVING STREAM***

***PERMIT #
STATUS***

BOZARDS POND
HIGH HILL CREEK

09-N03
ACTIVE

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-045	GB	MIDDENDORF	FT. JACKSON
AMB-047	GB	MIDDENDORF	HOPKINS

All water samples collected from ambient monitoring wells **AMB-045** and **AMB-047** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
CONGAREE RIVER DAK AMERICAS LLC	SC0001333 MAJOR INDUSTRIAL
CONGAREE RIVER WESTINGHOUSE ELECTRIC LLC/COLUMBIA	SC0001848 MAJOR INDUSTRIAL
CONGAREE RIVER SCE&G/COLUMBIA HYDRO PLANT	SC0002062 MINOR INDUSTRIAL
CONGAREE RIVER CITY OF COLUMBIA/METRO PLANT	SC0020940 MAJOR DOMESTIC
CONGAREE RIVER CITY OF CAYCE WWTP	SC0024147 MAJOR DOMESTIC
CONGAREE RIVER DEVRO INC./CORIA DIV.	SC0033367 MINOR INDUSTRIAL
CONGAREE RIVER EAST RICHLAND COUNTY PSD/GILLS CREEK PLANT	SC0038865 MAJOR DOMESTIC
CONGAREE RIVER CITY OF WEST COLUMBIA WTP	SCG641005 MINOR DOMESTIC
CONGAREE RIVER SC DEPT. AGRIC. CALIBRATION STATION	SC0041386 MINOR INDUSTRIAL
CONGAREE RIVER COLUMBIA SILICA/DIXIANA MINE	SCG730451 MINOR INDUSTRIAL
DRY CREEK BROOKFOREST MOBILE HOME ESTATES	SC0031178 MINOR DOMESTIC
DRY CREEK TRIBUTARY BELLE MEADE SD	SC0030988 MINOR DOMESTIC
DRY CREEK TRIBUTARY PINEY GROVE UTILITIES/LLOYDWOOD SD	SC0031402 MINOR DOMESTIC
ROCKY BRANCH VULCAN CONSTR. MATERIALS CO./COLUMBIA QUARRY	SCG730054 MINOR INDUSTRIAL
TOMS BRANCH TCH PROPERTIES LLC	SC0031321 MINOR DOMESTIC

TOMS BRANCH ROLLING MEADOWS MHP/HERITAGE	SC0033685 MINOR DOMESTIC
SAVANY HUNT CREEK SC DEPT OF TRANS./I-26 REST AREA	SC0040339 MINOR DOMESTIC
CEDAR CREEK SC AIR NATL. GUARD/MCENTIRE AB	SC0000701 MINOR INDUSTRIAL
CEDAR CREEK CEDAR CREEK MHP	SC0032018 MINOR DOMESTIC
CEDAR CREEK TRIBUTARY RICHLAND DISTRICT I/GADSDEN ELEM.	SC0031526 MINOR DOMESTIC
CABIN BRANCH PINEY GROVE UTILITIES/FRANKLIN PARK SD	SC0031399 MINOR DOMESTIC
CABIN BRANCH TRIBUTARY RICHLAND DISTRICT I/HOPKINS JR HIGH	SC0031500 MINOR DOMESTIC
HORSEPEN BRANCH RICHLAND DISTRICT I/HOPKINS ELEM. SCHOOL	SC0031496 MINOR DOMESTIC
TOMS BRANCH 2 COR LLC/HWY 321 SAND MINE	SCG731018 MINOR INDUSTRIAL
TOMS BRANCH TRIBUTARY LANIER CONSTRUCTION/LANIER MINE	SCG731091 MINOR INDUSTRIAL
TOMS BRANCH TRIBUTARY LANIER CONSTRUCTION/STROUD MINE	SCG731092 MINOR INDUSTRIAL
MILL CREEK FT JACKSON MINE	SCG731156 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>	
CEDAR CREEK ----- RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE I MEDIUM MS4
CEDAR CREEK CITY OF COLUMBIA CITY OF COLUMBIA CITY OF COLUMBIA	SCS790001 PHASE I MEDIUM MS4
CEDAR CREEK CITY OF COLUMBIA FT. JACKSON FT. JACKSON	SCR037901 PHASE II SMALL MS4
CEDAR CREEK CITY OF CAYCE CITY OF CAYCE LEXINGTON COUNTY	SCR036301 PHASE II SMALL MS4

CEDAR CREEK
 UNINCORPORATED AREAS
 LEXINGTON COUNTY
 LEXINGTON COUNTY

SCR036304
 PHASE II
 SMALL MS4

CEDAR CREEK
 CITY OF WEST COLUMBIA
 CITY OF WEST COLUMBIA
 LEXINGTON COUNTY

SCR036308
 PHASE II
 SMALL MS4

CEDAR CREEK
 UNINCORPORATED AREAS
 RICHLAND COUNTY
 RICHLAND COUNTY

SCS400001
 PHASE I
 MEDIUM MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME
FACILITY TYPE

PERMIT #
STATUS

FORT JACKSON INERT LF

 CLOSED

FORT JACKSON SANITARY LF
 DOMESTIC

405802-1101
 CLOSED

FORT JACKSON COMPOST SITE
 COMPOST

405802-3001
 ACTIVE

FORT JACKSON SANITARY LF
 DOMESTIC

405001-1101
 CLOSED

HUGER STREET DUMP
 DOMESTIC

 CLOSED

HEMLOCK ROAD DUMP
 DOMESTIC

 CLOSED

STADIUM ROAD DUMP
 DOMESTIC

 CLOSED

ROSEWOOD DRIVE DUMP
 DOMESTIC

 CLOSED

SOUTHEAST CONCRETE LANDFILL
 INDUSTRIAL

323335-1601
 INACTIVE

SOUTHEAST CONCRETE LANDFILL
 INDUSTRIAL

322448-1601
 INACTIVE

SOUTHEAST CONCRETE LANDFILL
 INDUSTRIAL

 INACTIVE

TAYLOR BROTHERS C&D DUMP
 C&D

 INACTIVE

LEXINGTON COUNTY LANDFILL #1
 DOMESTIC

 CLOSED

GASTON DUMP DOMESTIC	----- CLOSED
DAK AMERICAS LLC LF INDUSTRIAL	092432-1601 ACTIVE
DAK AMERICAS LLC LF C&D	093322-1901 ACTIVE
CALHOUN COUNTY C&D & LCD LANDFILL C&D	091001-1201 ACTIVE
CALHOUN COUNTY MSW LANDFILL DOMESTIC	091001-1101 INACTIVE
CALHOUN COUNTY SANITARY LANDFILL DOMESTIC	----- INACTIVE
REGULATORY SOLUTIONS INC. PROCESSING FACILITY INDUSTRIAL	092622-2001 ACTIVE

Land Applications

<i>LAND APPLICATION FACILITY NAME</i>	<i>PERMIT # TYPE</i>
SLUDGE INJECTION BIO TECH, INC.	ND0069761 DOMESTIC
SPRAYFIELD MANCHESTER FARMS	ND0068969 INDUSTRIAL

Mining Activities

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
LANIER CONSTRUCTION CO., INC. LANIER ASPHALT PLANT	0124-63 SAND
LANIER CONSTRUCTION CO., INC. STROUD MINE	0946-63 SAND
FOSTER-DIXIANA CORP. SILICA PIT	0141-63 SAND
VULCAN CONSTR. MATERIALS CO. COLUMBIA QUARRY	0133-79 GRANITE
B&T SAND CO., INC. CALHOUN COUNTY SAND MINE	1653-63 SAND/CLAY

Water Quantity

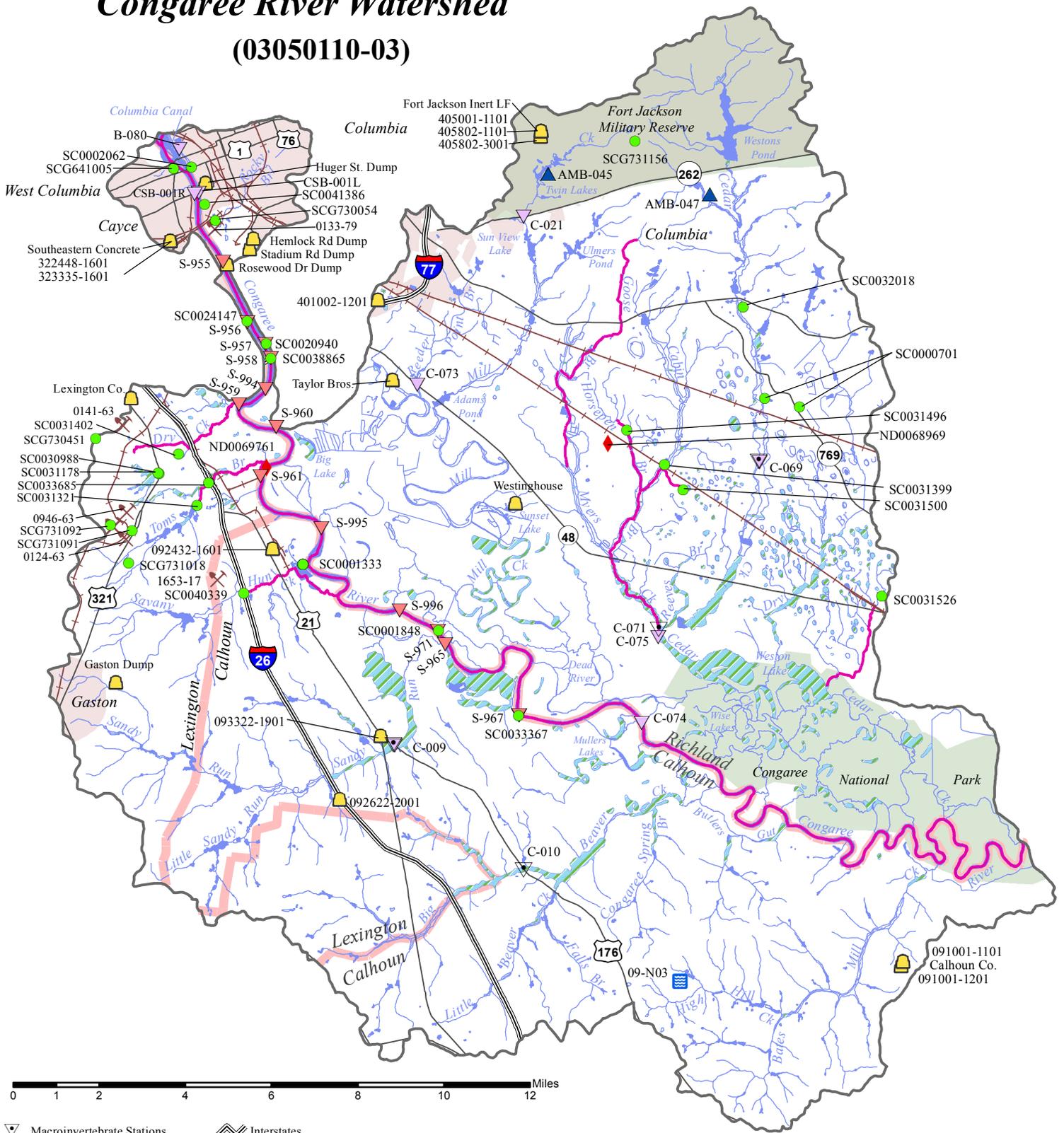
<i>WATER USER STREAM</i>	<i>REG. CAPACITY (MGD) PUMPING CAPACITY (MGD)</i>
CITY OF CAYCE	24.0
CONGAREE RIVER	14.4
CITY OF COLUMBIA	91.0
BROAD RIVER CANAL	71.0

Growth Potential

There is an overall high potential for growth in this watershed, which contains a portion of the City of Columbia. With the Innovista Development Plans in place there is a high potential for continued residential, commercial, and industrial growth in the Vista and Olympia districts of Columbia. The continued expansion of the Three Rivers Greenway will increase recreational use in this area. Growth is also projected along the I-77 beltway around the city. The Olympia and Bluff Road areas contain heavy industrial development. Only the upper portion of the watershed, near the City of Columbia, has available water and sewer service. The City of Columbia has installed an effluent diffuser in the Congaree River to improve dilution of the treated effluent. Richland County has plans to extend sewer service along the US 378 corridor between Columbia and Eastover, which could provide an impetus for growth in the unincorporated portions of lower Richland County.

The Cities of West Columbia and Cayce are also located in this watershed. The planned expansion of the Cayce WWTP will allow for continued residential, commercial, and industrial development in this portion of the watershed. The area around Silver Lake is expected to undergo substantial residential and industrial development. The area south of the City of Cayce, along I-26 and US 321 are expected to experience continued growth following the relocation of SCE&G from downtown Columbia and the development of the State Farmers Market. The Bluff Road/Shop Road areas in Columbia are expected to experience continued growth with additional University of South Carolina oriented residential development and new industrial, office development. The area along US 176 and US 21 should experience moderate growth, primarily industrial.

Congaree River Watershed (03050110-03)



- 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
- Wetland
- Lake
- 10-Digit Hydrologic Units
- Cities/Towns
- Public Lands

