

03050105-11
(Bullock Creek)

General Description

The South Carolina portion of 03050105-11 (formerly 03050105-140) is located in York County and consists primarily of **Bullock Creek** and its tributaries. The watershed occupies 77,423 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 70.2% forested land, 21.6% agricultural land, 4.6% urban land, 1.8% forested wetland, 1.5% scrub/shrub land, and 0.3% water.

Bullock Creek originates near the South Carolina/North Carolina border and accepts drainage from Gin Branch, Rocky Branch, Buckhorn Creek (Silver Creek), and Clark Fork. Clark Fork also originates near the state line and flows through Lake Crawford to join Jennings Branch and forms Lake York before accepting drainage from Biggers Branch and Saltlick Branch. Downstream of Clark Fork, Bullock Creek accepts drainage from Thompson Branch, Berry Branch, Purgatory Branch, Mitchell Branch, Plexico Branch, Loves Creek, and Bells Creek (Prater Branch, Dowdle Branch). Kings Mountain State Park extends over the upper portion of the watershed along with Kings Mountain National Military Park. There are 127.5 stream miles and 161.4 acres of lake waters in this watershed.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
B-739	BIO	FW	BULLOCK CREEK AT S-46-40
B-325	S/W	FW	CLARK FORK INTO CRAWFORD LAKE NEAR SC 161 & 705
B-737	W	FW	LAKE YORK IN KINGS MOUNTAIN STATE PARK
B-326	S/W	FW	LONG BRANCH ON SC 216, BELOW KINGS MOUNTAIN PARK REC. AREA
B-157	BIO	FW	CLARK FORK AT S-46-63
B-159	S/INT	FW	BULLOCK CREEK AT SC 97, 4.8 MI S OF HICKORY GROVE

Bullock Creek – There are two SCDHEC monitoring stations along Bullock Creek. At the upstream site (**B-739**), aquatic life uses are fully supported based on macroinvertebrate community data. At the downstream site (**B-159**), aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and decreasing trends in dissolved oxygen concentration. Recreational uses are not supported due to fecal coliform bacteria excursions.

Clark Fork (B-325) – Aquatic life uses are partially supported due to dissolved oxygen excursions. Recreational uses are not supported due to fecal coliform bacteria excursions.

Lake York (B-737) - Aquatic life and recreational uses are fully supported.

Long Branch (B-326) – Aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and turbidity. Recreational uses are partially supported due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

Clark Creek (B-157) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Natural Swimming Areas

<i>FACILITY NAME</i>	<i>PERMIT #</i>
<i>RECEIVING STREAM</i>	<i>STATUS</i>
KINGS MOUNTAIN STATE PARK	46-N07
LAKE CRAWFORD	ACTIVE

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
<i>PERMITTED FLOW @ PIPE (MGD)</i>	<i>COMMENT</i>
LONG BRANCH	SC0025275
US PARK SERVICE/KINGS MTN NATL MIL PARK	MINOR INDUSTRIAL
PIPE #: 001 FLOW: M/R	

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i>	<i>PERMIT #</i>
<i>FACILITY TYPE</i>	<i>STATUS</i>
GREENEAGLE, INC.	PROPOSED
C&D	-----

Land Application Sites

<i>LAND APPLICATION SYSTEM</i>	<i>ND#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
SPRAYFIELD	ND0080748
G & W INC.	INDUSTRIAL

Growth Potential

There is a low potential for growth in this watershed, which contains portions of the Towns of Hickory Grove, Smyrna, and Sharon. Public water service is limited to Hickory and Sharon. Although the area is largely rural, residential activity is increasing as a result of the close proximity to the Town of Clover, the City of York, and the Greater Charlotte Metropolitan Area.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

A TMDL was developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Bullock Creek** at water quality monitoring site **B-159**. Currently there is no active facility that has fecal coliform limits in its NPDES permit to discharge into the creek. None of the watershed is within a Municipal Separate Storm Sewer System (MS4) designated area. Possible sources of fecal coliform bacteria in Bullock Creek include upstream sources, failing onsite wastewater

disposal systems, cattle in the creeks, pets, and wildlife. The TMDL specifies a reduction in the load of fecal coliform bacteria into Bullock Creek of 48% in order for the creek to meet the recreational use standard.

TMDLs were developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Clark Fork** and its tributary, **Long Branch**, at water quality monitoring sites **B-325** and **B-326**. The upper part of the watershed is in North Carolina. No currently active facilities that have fecal coliform limits in their NPDES permits discharge into the creek. The watershed is not within a MS4 designated area. Possible sources of fecal coliform bacteria in Clark Fork and Long Branch include failing onsite wastewater disposal systems, out-of-state sources, pets, and wildlife. The TMDL specifies reductions in the load of fecal coliform bacteria into Clark Fork of 49% and Long Branch of 63% in order for the creek to meet the recreational use standard.

Funding for TMDL implementation activities is currently available. For more information, see the Bureau of Water web page www.scdhec.gov/water or call the Watershed Program at (803) 898-4300.

Bullock Creek Watershed (03050105-11)

-  Macroinvertebrate Stations
-  Water Quality Monitoring Stations
-  Approved TMDL
-  Groundwater Monitoring 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

