

03050105-08
(*Buffalo Creek*)

General Description

The South Carolina portion of 03050105-08 (formerly 03050105-100) is located in Cherokee County and consists primarily of *Buffalo Creek* and its tributaries. The watershed occupies 17,309 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 50.6% forested land, 32.9% agricultural land, 13.1% urban land, 2.1% scrub/shrub land, 0.2% water, 1.0% forested wetland, and 0.1% barren land.

Bee Branch flows across the North Carolina border and drains into Buffalo Creek, which flows into the Broad River. There are a total of 21.0 stream miles and 6.6 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>
B-740	BIO	FW	BUFFALO CREEK AT SC 198
B-119	S/W	FW	BUFFALO CREEK AT S-11-213, 2.2 MI NNW OF BLACKSBURG
B-057	S/INT	FW	BUFFALO CREEK AT SC 5, 1 MI W OF BLACKSBURG

Buffalo Creek – There are three SCDHEC monitoring stations along Buffalo Creek. At the furthest upstream site (*B-740*), aquatic life uses are fully supported based on macroinvertebrate community data. At the midstream site (*B-119*), aquatic life uses are fully supported, and a significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. At the downstream site (*B-057*), aquatic life uses are partially supported due to occurrences of copper in excess of the aquatic life chronic criterion. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. A very high concentration of cadmium was measured in the 2004 sediment sample. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
BUFFALO CREEK SHARMA PETROLEUM PIPE #: 002 FLOW: 0.0075	SC0042196 MINOR INDUSTRIAL
BUFFALO CREEK TRIBUTARY B&W ENTERPRISE/BAILEY MINE PIPE #: 001 FLOW: M/R	SCG730484 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i>	<i>PERMIT #</i>
<i>FACILITY TYPE</i>	<i>STATUS</i>
MONSANTO TEXTILES CO.	IWP-179
INDUSTRIAL	INACTIVE
LEIGH FIBERS LAND APPL. COTTON MOTE	422634-8001
LAND APPLICATION	INACTIVE

Mining Activities

<i>MINING COMPANY</i>	<i>PERMIT #</i>
<i>MINE NAME</i>	<i>MINERAL</i>
B&W ENTERPRISE OF NORTH AMERICA INC.	1435-21
BAILEY MINE	SAND

Growth Potential

There is a moderate potential for growth in this watershed, which contains a portion of the Town of Blacksburg. Major growth is expected along the I-85 corridor, which stretches across the watershed. Commercial growth is also associated with the I-85 corridor near the Town of Blacksburg.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Buffalo Creek** at water quality monitoring sites **B-119** and **B-057**. 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 Municipal Separate Storm Sewer System (MS4) designated area. Possible sources of fecal coliform bacteria in Buffalo Creek include out-of-state sources, leaking sewers, failing onsite wastewater disposal systems, urban residential runoff, pets, and wildlife. The TMDL specifies reductions in the load of fecal coliform bacteria into Buffalo Creek of 74% (B-119) and 72% (B-057) 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.