

## 03050201-020

(Wadboo Creek)

### General Description

Watershed 03050201-020 is located in Berkeley County and consists primarily of *Wadboo Creek* and its tributaries. The watershed occupies 80,973 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Bladen-Wahee-Hobcaw-Mouzon-Chipley series. The erodibility of the soil (K) averages 0.17 and the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 77.3% forested land, 7.7% scrub/shrub land, 7.2% forested wetland, 6.7% agricultural land, 0.7% barren land, 0.3% water, and 0.1% urban land.

Wadboo Swamp originates near the Town of St. Stephen and merges with the Tail Race Canal to form the West Branch Cooper River. Gravel Hill Swamp accepts the drainage of Walker Swamp (Halfway Swamp) then flows into Wadboo Swamp followed by Rice Hope Swamp, Stewart Creek, Whiskinboo Creek (Cane Pond Branch), Cane Gully Branch (Graveyard Lead, Peters Swamp, Callum Branch), Bullhead Run (Mary Anne Branch), and Broad Ax Branch (Canady Branch, Mingo Branch). Wadboo Swamp becomes Wadboo Creek downstream of Broad Ax Branch. Walleye Bay, located at the headwaters of Whiskinboo Creek and Cane Gully Branch accepts drainage from Big Ocean Bay, Whitten Bay, and Boggy Swamp. Little Ocean Bay, Graveyard Bay, Huckleberry Bay, and Mill Bay drain into Peters Swamp. There are a total of 105.1 stream miles and 57.4 acres of lake waters in this watershed, all classified FW. Another natural resource is the Francis Marion National Forest, which extends across the entire watershed.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
ST-007	S/W	FW	WALKER SWAMP AT US 52 2.5 MI S OF ST. STEPHENS
RS-02461	RS02	FW	WADBOO SWAMP AT S-08-447 THIRD BRIDGE FROM WEST
CSTL-113	W/INT	FW	WADBOO CREEK AT SC 402

*Walker Swamp (ST-007)* – Aquatic life uses are fully supported, and a significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions.

*Wadboo Creek* – There are two SCDHEC monitoring sites along Wadboo Creek. This is a blackwater system, characterized by naturally low dissolved oxygen conditions. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. At the upstream site (*RS-02461*), aquatic life uses are fully supported, but recreational uses are partially supported due to fecal coliform bacteria excursions. At the downstream site (*CSTL-113*), aquatic life uses are fully supported. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total nitrogen concentration suggest improving conditions for these parameters. 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.

*A fish consumption advisory has been issued by the Department for mercury and includes Wadboo Creek within this watershed (see advisory p.69).*

## **NPDES Program**

### ***Active NPDES Facilities***

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
HALFWAY SWAMP GA PACIFIC/RUSSELLVILLE PIPE #: 001 FLOW: 0.905	SCG250179 MINOR INDUSTRIAL EFFLUENT
WADBOO SWAMP MACEDONIA ELEM & HIGH SCHOOL PIPE #: 001 FLOW: 0.0298	SC0027090 MINOR DOMESTIC

## **Nonpoint Source Management Program**

### ***Mining Activities***

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
WARE BROTHERS, INC. FONDREN EARTH EXCAVATION	0817-15 SAND/GRAVEL

## **Growth Potential**

There is a low potential for growth in this watershed, which contains the Town of Bonneau and portions of the communities of Macedonia and Russellville. A large portion of the watershed is contained within the Francis Marion National Forest.

# Lake Moultrie and Wadboo Swamp Watersheds (03050201-010,-020)

