

03050202-010

(Cypress Swamp)

General Description

Watershed 03050202-010 is located in Berkeley and Dorchester Counties and consists primarily of *Cypress Swamp* and its tributaries from its origin to Captains Branch. The watershed occupies 100,364 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Rains-Hobcaw-Lynchburg-Mouzon series. The erodibility of the soil (K) averages 0.20 and slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 76.6% forested land, 9.3% forested wetland, 6.8% agricultural land, 5.5% scrub/shrub land, 0.8% urban land, 0.5% barren land, 0.4% water, and 0.1% nonforested wetland.

Williams Branch flows into Big Run and is joined by Black Creek to form Wassamassaw Swamp, which accepts drainage from Mill Branch, Acton Creek, and Simmons Bay. Partridge Creek (Rudd Branch, Mill Branch) joins Wassamassaw Swamp to form the headwaters of the Cypress Swamp. The Cypress Swamp receives drainage from Sandy Run (Smith Branch), Miller Dam Branch, Felder Branch, Dawson Branch, Stanley Branch (Kelly Branch), and Green Bay Branch near the Town of Ridgeville. There are a total of 176.2 stream miles and 82.9 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> |
|------------------|-------------|--------------|-------------------------------|
| CSTL-063 | P/W | FW | WASSAMASSAW SWAMP AT U.S. 176 |
| CSTL-078 | W/INT | FW | CYPRESS SWAMP AT U.S. 78 |

Wassamassaw Swamp (CSTL-063) - Aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life acute criterion. This is a blackwater system, characterized by naturally low dissolved oxygen conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. 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 due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

Cypress Swamp (CSTL-078) - Aquatic life uses are not supported due to occurrences of zinc in excess of the aquatic life acute criterion. This is a blackwater system, characterized by naturally low dissolved oxygen conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Groundwater Quality

| <u>Well #</u> | <u>Class</u> | <u>Aquifer</u> | <u>Location</u> |
|---------------|--------------|--------------------|---------------------------|
| AMB-096 | GB | TERTIARY LIMESTONE | LEIBER CORRECTIONAL INST. |

NPDES Program

Active NPDES Facilities

| <i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i> | <i>NPDES# TYPE COMMENT</i> |
|---|------------------------------------|
| MILL BRANCH D&A PARTNERSHIP/CUMBIE PIT PIPE #: 001 FLOW: M/R | SCG730115 MINOR INDUSTRIAL |

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

| <i>LANDFILL NAME FACILITY TYPE</i> | <i>PERMIT # STATUS</i> |
|--|---------------------------------|
| WESTVACO INDUSTRIAL | 082430-1601 (IWP-201) ACTIVE |
| BFI MUNICIPAL | DWP-129, DWP-163 CLOSED |
| TRIDENT NORTH LANDFILL (BFI) INDUSTRIAL | IWP-163 CLOSED |

Mining Activities

| <i>MINING COMPANY MINE NAME</i> | <i>PERMIT # MINERAL</i> |
|--|-----------------------------|
| ACD, A PARTNERSHIP DANGERFIELD MINE (17A) | 0625-15 SAND; SAND/CLAY |
| WHITFIELD CO. WHITS PIT | 0483-15 SAND |
| TRULUCK INDUSTRIES, INC. BERKELEY MINE | 0935-15 SAND |

Growth Potential

Low density population growth is projected to occur in this watershed, which contains a portion of the Town of Ridgeville.

Cypress Swamp, Ashley River, and Dorchester Creek/Eagle Creek Watersheds

(03050202-010, -020,-030)

-  Mines
-  Landfills
-  Water Quality Monitoring Sites
-  Groundwater Monitoring Sites
-  NPDES Permits
-  Highways
-  Interstate
-  Rail lines
-  Modeled Streams
-  Streams
-  County Lines
-  Lakes
-  SCDHEC 11-Digit Hydrologic Units
-  City
-  Public Lands

