

03040201-05
(Great Pee Dee River)

General Description

The South Carolina portion of 03040201-05 is located in Chesterfield, Marlboro, and Darlington Counties and consists primarily of the **Great Pee Dee River** and its tributaries from Westfield Creek to Cedar Creek. The watershed occupies 212,351 acres of the Sandhills and Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 32.6% forested land, 29.5% agricultural land, 27.4% forested wetland, 6.9% urban land, 1.7% water, 1.2% nonforested wetland, and 0.7% barren land.

This section of the Great Pee Dee River accepts drainage from its upstream reaches, along with Westfield Creek (Little Westfield Creek, Goodmans Creek), Whites Creek (Wallace Pond, Everett Millpond), Hicks Creek, Husbands Creek, Huckleberry Branch (Wilson Branch), and the Thompson Creek Watershed near the Town of Cheraw. Phils Creek (Wolf Creek, Andersons Millpond, Grants Millpond) enters the river next, followed by Beaverdam Creek, Tarkiln Creek, Naked Creek (Bullards Millpond, McLaurins Millpond, Davids Millpond, Herndon Branch), Crooked Creek, Hugh Creek, Reedys Branch, and Cedar Creek (Spot Mill Creek). Crooked Creek accepts drainage from Lightwood Knot Creek, Usher Pond, Goodwins Pond, Burnt Factory Lake, Beverly Creek, and Lily Quick Creek before flowing through Lake Paul Wallace and McCalls Millpond near the City of Bennettsville. Cedar Creek lies within the Sand Hills State Forest and accepts drainage from Little Cedar Creek (Pool Branch), Harris Creek, Coker Pond, and Spot Mill Creek. There are a total of 457.2 stream miles and 1,939 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>
PD-191	INT	FW	WHITES CREEK AT US 1
PD-339	INT	FW	WESTFIELD CREEK AT US 52
PD-012	INT	FW	GREAT PEE DEE RIVER AT US 1 NE CHERAW
PD-713	BIO	FW	GREAT PEE DEE RIVER AT SR 166
RL-09100	RL09	FW	LAKE WALLACE, 0.6 MI N OF SKI IMPOUNDMENT BOAT LANDING – MIDCHANNEL
RL-05398	RL05	FW	LAKE WALLACE, EAST SHORE NEAR PICNIC AREA
CL-086	W	FW	LAKE WALLACE, EQUIDISTANT FROM DAM AND SHORELINES
PD-107	W	FW	CROOKED CREEK AT SC 9 IN BENNETTSVILLE
PD-014	W	FW	CROOKED CREEK AT S-35-43
PD-063	INT	FW	CROOKED CREEK AT SC 912
PD-675	BIO	FW	CEDAR CREEK AT SR 171
PD-712	BIO	FW	CEDAR CREEK AT SR 675
RS-08241	RS08	FW	HARRIS CREEK AT S-13-80
PD-151	INT	FW	CEDAR CREEK AT US 52
PD-015	W	FW	GREAT PEE DEE RIVER AT US 15 & 401

Whites Creek (PD-191) - 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. Aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and turbidity. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are fully supported.

Westfield Creek (PD-339) - Aquatic life uses are partially supported due to pH excursions. There are also significant increasing trends in five-day biochemical oxygen demand and turbidity. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria.

Great Pee Dee River – There are two SCDHEC monitoring sites along this section of the Great Pee Dee River. At the upstream site (**PD-012**), aquatic life uses are not supported due to copper in excess of the aquatic life acute criterion. In addition, there are significant increasing trends in five-day biochemical oxygen demand and total phosphorus concentration. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria. At the downstream site (**PD-015**), aquatic life and recreational uses are fully supported and significant decreasing trends in turbidity, total nitrogen concentration, and total phosphorus concentration suggest improving conditions for these parameters.

Lightwood Knot Creek (PD-713) - Aquatic life uses are partially supported based on macroinvertebrate community data.

Lake Wallace - There are three SCDHEC monitoring sites along Lake Wallace and recreational uses are fully supported at all sites. This is a blackwater system, characterized by naturally low pH conditions. At the uplake site (**RL-09100**), aquatic life uses are not supported due to excursions related to turbidity, total nitrogen, total phosphorus, chlorophyll-a, and pH. At the midlake site (**RL-05398**), aquatic life uses are not supported due to excursions related to turbidity, total phosphorus, and chlorophyll-a. Aquatic life uses at the downlake site (**CL-086**) are fully supported. Although pH excursions occurred at this site, they were typical of values seen in blackwater systems and were considered natural, not standards violations.

Crooked Creek - There are three SCDHEC monitoring sites along Crooked Creek. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred at the lower two sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. At the furthest upstream site (**PD-107**) and midstream site (**PD-014**), aquatic life and recreational uses are fully supported. At the furthest downstream site (**PD-063**), aquatic life and recreational uses are again fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand, total phosphorus concentration, and fecal coliform bacteria. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter.

Cedar Creek – There are two SCDHEC monitoring sites along Cedar Creek. At the upstream site (**PD-675**), aquatic life uses are fully supported based on macroinvertebrate community data. At the downstream site (**PD-151**), aquatic life uses are fully supported; however, there are significant increasing trends in five-day biological oxygen demand and total phosphorus concentration. There is a significant decreasing trend in pH. Recreational uses are fully supported.

Little Cedar Creek (PD-712) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Harris Creek (RS-08241) – This is a blackwater system, characterized by naturally low dissolved oxygen and pH conditions. Although dissolved oxygen and pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life and recreational uses are fully supported.

*A fish consumption advisory has been issued by the Department for mercury and includes the **Great Pee Dee River and Lake Wallace** within this watershed (see advisory p.144).*

Natural Swimming Areas

FACILITY NAME RECEIVING STREAM	PERMIT # STATUS
LAKE PAUL WALLACE LAKE WALLACE	34-N01 ACTIVE
CAMP HORIZON LAKE WALLACE	34-N04 ACTIVE
CAMP COKER SPOT MILL CREEK	13-N02 ACTIVE

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME	NPDES# TYPE
GREAT PEE DEE RIVER TOWN OF CHERAW WWTP	SC0020249 MAJOR DOMESTIC
GREAT PEE DEE RIVER DOMTAR PAPER CO.LLC/MARLBORO MILL	SC0042188 MAJOR INDUSTRIAL
GREAT PEE DEE RIVER GALEY & LORD, INC./SOCIETY HILL	SC0002704 MAJOR INDUSTRIAL
GREAT PEE DEE RIVER TRIBUTARY HANSON AGGREGATES SE/CASH MINE	SCG730467 MINOR INDUSTRIAL
CROOKED CREEK HANSON AGGREGATES SE/MARLBORO PLANT	SCG730359 MINOR INDUSTRIAL
CROOKED CREEK CITY OF BENNETTSVILLE WWTP	SC0025178 MAJOR DOMESTIC
SPOT MILL CREEK TRIBUTARY MOREE FARMS/PARADISE PIT	SCG730558 MINOR INDUSTRIAL
WILSON BRANCH TRIBUTARY SCHAEFFLER GROUP USA, INC.	SCG250163 MINOR INDUSTRIAL
PHILS CREEK PALMETTO BRICK/IRBY MINE	SCG730240 MINOR INDUSTRIAL
PHILS CREEK TRIBUTARY PALMETTO BRICK/PALMETTO SAND MINE	SCG730573 MINOR INDUSTRIAL
CEDAR CREEK PALMETTO BRICK/WINBURN MINE	SCG730241 MINOR INDUSTRIAL

BEVERLY CREEK MARLBORO COUNTY/COUNTY PIT	SCG730158 MINOR INDUSTRIAL
BEAVERDAM CREEK TRIBUTARY PALMETTO BRICK/CLINKSCALE MINE	SCG730443 MINOR INDUSTRIAL
HUCKLEBERRY BRANCH FURR GRADING/KNIGHT STREET MINE	SCG731167 MINOR INDUSTRIAL
NAKED CREEK HANSON AGGREGATES SE/MARLBORO FIELD PLANT	SCG730359 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
PALMETTO BRICK CO. INDUSTRIAL	353324-1601 ACTIVE
CHERAW SANITARY LANDFILL MUNICIPAL	----- CLOSED
WILLIAMETTE COMPOSTING COMPOSTING	353301-3001 INACTIVE
FURR COMPOSTING FACILITY COMPOSTING	132670-3001 INACTIVE
FURR FACILITY C&D LANDFILL C&D	132670-1201 ACTIVE
MCDUFFIE & SON COMPOSTING COMPOSTING	352691-3001 ACTIVE
WEYERHAEUSER COMPANY INDUSTRIAL	353301-1601 ACTIVE
WEYERHAEUSER COMPANY LAND APPLICATION	353301-8001 ACTIVE
CHESTERFIELD COUNTY LANDFILL INDUSTRIAL	131001-1601 ACTIVE
SANDHILLS REGIONAL MSW LANDFILL MUNICIPAL	----- PROPOSED

Mining Activities

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
PALMETTO BRICK CO. CLINKSCALE MINE	1528-69 SAND
PALMETTO BRICK CO. IRBY MINE	0171-69 CLAY
HANSON AGGREGATES SE, INC. CASH PLANT	0092-25 SAND/GRAVEL

FURR GRADING & PAVING, INC. PEE DEE MINE	0466-25 SAND/GRAVEL
MARLBORO COUNTY MARLBORO COUNTY PIT	0280-69 SAND/CLAY
TE BROWN & ASSOCIATES BURNT FACTORY MINE	1716-69 SAND/CLAY
HANSON AGGREGATES SE, INC. MARLBORO PLANT	0095-69 SAND/GRAVEL
HANSON AGGREGATES SE, INC. MARLBORO FIELD PLANT	0096-69 SAND/GRAVEL
PALMETTO BRICK CO. WINBURN MINE	0997-25 KAOLIN
PALMETTO BRICK CO. PALMETTO SAND MINE	1739-69 SAND
FURR GRADING & PAVING, INC. KNIGHT STREET MINE	1980-25 SAND; TOP SOIL
FURR GRADING & PAVING, INC. FRAZIER MINE	1793-69 SAND; TOP SOIL

Groundwater Quantity

Portions of this watershed fall within the Pee Dee Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.22).

<i>WATER USER STREAM</i>	<i>REGULATED CAPACITY (MGD) PUMPING CAPACITY (MGD)</i>
TOWN OF CHERAW	4.5
GREAT PEE DEE RIVER	11.5
CITY OF BENNETTSVILLE	4.00
LAKE WALLACE	6.00

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Towns of Cheraw and Society Hill, and the City of Bennettsville and is projected to have one of the largest population growth rates in the region. There are numerous industries in the watershed, most in and around the municipal limits of Cheraw. Commercial development is also centered around Cheraw, particularly west of town along S.C. Hwy. 9, and additional growth is expected. A large portion of the watershed is not served by public water or sewer systems, primarily due to the large expanse of the floodplain associated with the Great Pee Dee River. These services are provided in and immediately around the Town of Cheraw, and along S.C. Hwy. 34 east of the City of Darlington. Water and sewer services are available in and around Bennettsville and should encourage growth. Water service is available in Society Hill, but there is no sewer service. A portion of the watershed is within the Sand Hills State Forest, and the remainder is primarily agricultural and timberland uses. The proposed Preferred Alternative route of I-73 (Northern Corridor) would cross this watershed and could bring some growth to the area, especially around interchanges.

