

03040205-04

(Pocotaligo River)

General Description

Watershed 03040205-04 is located in Sumter and Clarendon Counties and consists primarily of the *Pocotaligo River* and its tributaries. The watershed occupies 171,780 acres of the Upper Coastal Plain region of South Carolina. Land use/land cover in the watershed includes: 37.4% agricultural land, 32.4% forested wetland, 19.6% forested land, 8.7% urban land, 1.5% nonforested wetland, 0.3% water, and 0.1% barren land.

Green Swamp and Cane Savannah Creek join to form the headwaters of the Pocotaligo River near the City of Sumter, which then accepts drainage from Pocalla Creek (DesChamps Pond), Turkey Creek, Briar Branch, Boots Branch, Sammy Swamp (Boggy Swamp, Broadway Branch, Hungary Hall Branch, DesChamps Branch, Home Branch, Guckolds Branch), and Big Branch. Further downstream, another Big Branch enters the river followed by Bell Branch and Ox Swamp (Hog Branch, Lemon Branch, Fellowship Branch, Davis Branch, Loss Branch) near the City of Manning. Bear Creek enters the river next, followed by Deep Creek (Elwood Bay, Hog Bay, White Pond, Joes Branch), Juneburn Branch (Lightwood Knot Branch), Peddlers Branch, and Lakewood Creek (Lakewood Pond). The Pocotaligo River Watershed drains into the Black River. The western portion of the watershed is within the Manchester State Forest. There are a total of 313.1 stream miles and 336.6 acres of lake waters in this watershed. The Pocotaligo River, Pocalla Creek, and Turkey Creek are classified FW* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams in the watershed are classified FW.

Surface Water Quality

| <u>Station #</u> | <u>Type</u> | <u>Class</u> | <u>Description</u> |
|------------------|-------------|--------------|--|
| PD-091 | INT | FW* | POCOTALIGO RIVER AT US 15, 3.5 MI S OF SUMTER |
| PD-098 | W | FW* | TURKEY CREEK AT LIBERTY ST IN SUMTER BY SANTEE PRINT WORKS |
| PD-040 | W | FW* | TURKEY CREEK AT US 521 |
| PD-202 | W | FW* | POCOTALIGO RIVER AT S-43-32, 9 MI SE OF SUMTER |
| RS-07192 | RS07 | FW | BIG BRANCH AT SC 261 |
| PD-115 | W | FW* | POCOTALIGO RIVER AT THIRD BRIDGE N OF MANNING ON US 301 |
| RS-08232 | RS08 | FW | UNNAMED TRIB TO JUNEburn BRANCH AT CULVERT ON S-14-123 |
| PD-043 | INT | FW* | POCOTALIGO RIVER AT S-14-50, 9.5 MI NE OF MANNING |

Pocotaligo River - There are four SCDHEC monitoring stations along the Pocotaligo River. At the furthest upstream site (*PD-091*), aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. There is also a significant increasing trend in five-day biological oxygen demand. A significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria. At the next site downstream (*PD-202*), aquatic life uses are fully supported; however, there is a significant increasing trend in turbidity. There is a significant increasing trend in pH. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform excursions. In addition, there is a significant increasing trend in fecal coliform bacteria.

Further downstream (*PD-115*), aquatic uses are fully supported; however, there is a significant increasing trend in turbidity. Recreational uses are partially supported due to fecal coliform excursions. At the furthest downstream site (*PD-043*), aquatic life uses are partially supported due to dissolved oxygen excursions. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria.

Turkey Creek – There are two SCDHEC monitoring stations along Turkey Creek. At the upstream site (*PD-098*), aquatic life uses are fully supported; however, there is a significant decreasing trend in dissolved oxygen. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. In addition, there is a significant increasing trend in fecal coliform bacteria. At the downstream site (*PD-040*), aquatic life uses are not supported due to dissolved oxygen and ammonia excursions. Recreational uses are not supported due to fecal coliform bacteria excursions.

Big Branch (RS-07192) – Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentration 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 not supported due to fecal coliform bacteria excursions.

Juneburn Branch Tributary (RS-08232) - Aquatic life uses are fully supported. Recreational uses are not supported due to fecal coliform bacteria excursions.

*A fish consumption advisory has been issued by the Department for mercury and includes the **Pocotaligo River** within this watershed (see advisory p.75).*

NPDES Program

Active NPDES Facilities

| <i>RECEIVING STREAM FACILITY NAME</i> | <i>NPDES# TYPE</i> |
|--|-------------------------------|
| POCOTALIGO RIVER CWS/POCALLA VILLAGE BELK SD | SC0030724 MINOR DOMESTIC |
| POCOTALIGO RIVER CITY OF SUMTER/POCOTALIGO RIVER PLANT | SC0027707 MAJOR DOMESTIC |
| POCOTALIGO RIVER CITY OF MANNING WWTP | SC0020419 MAJOR DOMESTIC |
| POCOTALIGO RIVER TRIBUTARY MCCUTCHEN FARMS/CALLOWAY PIT | SCG730552 MINOR INDUSTRIAL |
| BIG BRANCH L. DEAN WEAVER CONSTR./WL COKER PIT | SCG730685 MINOR INDUSTRIAL |
| POCALLA CREEK PILGRIMS PRIDE CORP./POULTRY PROC. PLT | SC0000795 MAJOR INDUSTRIAL |
| POCALLA CREEK APEX TOOL GROUP LLC | SCG250295 MINOR INDUSTRIAL |

BRIAR BRANCH
VB HAWTHORNE/12 BRIDGES ROAD MINE

SCG731309
MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

***RECEIVING STREAM
MUNICIPALITY
RESPONSIBLE PARTY
IMPLEMENTING PARTY***

***NPDES#
MS4 PHASE
MS4 SIZE***

POCOTALIGO RIVER
CITY OF SUMTER
CITY OF SUMTER
CITY OF SUMTER

SCR038502
PHASE II
SMALL MS4

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

***LANDFILL NAME
FACILITY TYPE***

***PERMIT #
STATUS***

GA PACIFIC CORP. C/C LANDFILL
CONSTRUCTION

143304-1201, 143304-1601
INACTIVE

BOB SPRINGERS LANDFILL
INDUSTRIAL

IWP-183
INACTIVE

GIANT RESOURCES RECOVERY
INDUSTRIAL

432675-2001
ACTIVE

SOUTHEASTERN CHEMICAL & SOLVENT CO.
INDUSTRIAL

432675-7301, 432675-7101
ACTIVE

CAMPBELL SOUP CO., INC.
INDUSTRIAL

INACTIVE

EAST COAST INDUSTRIAL SERVICES, INC.
INDUSTRIAL

142348-5201
ACTIVE

CITY OF MANNING DUMP
MUNICIPAL

CLOSED

TOWN OF PINEWOOD DUMP
MUNICIPAL

CLOSED

CLARENDON COUNTY LANDFILL
MUNICIPAL

141001-1103, 141001-1101
CLOSED

CLARENDON COUNTY C&D LANDFILL
CONSTRUCTION

141001-1203
ACTIVE

CLARENDON COUNTY SW TRANSFER STATION
CONSTRUCTION

141001-6001
ACTIVE

Mining Activities

***MINING COMPANY
MINE NAME***

***PERMIT #
MINERAL***

MCCUTCHEN FARMS
CALLOWAY PIT

0831-27
SAND

Growth Potential

There is a high potential for growth in this watershed, which includes the City of Manning and the Towns of Paxville and Pinewood. I-95 crosses the watershed near Manning, and other major roads running through Manning include U.S. Hwys. 15, 521, 301, and S.C. Hwys. 261 and 260. Besides the rail line connecting the Cities of Manning and Sumter, the Clarendon County Industrial Park will encourage future industrial growth, in conjunction with the City of Sumter's Pocotaligo Industrial Park and Continental Tire of the Americas Facilities along U.S. 521 and Sumter's Live Oak Industrial Park on U.S. Hwy 15. The remainder of the watershed is rural with agricultural and timberland uses. The City of Manning has extended its water service along U.S. 521 to the community of Alcolu at I-95. Additionally, the Cities of Manning and Summerton plan to connect their respective water systems along U.S. 301.

Watershed Restoration and Protection

Total Maximum Daily Loads (TMDLs)

In June 2013, fecal coliform TMDLs were developed for impaired stations **RS-03345**, **PD-202**, **RS-07192**, **PD-115**, **RS-08232**, and **RS-03347** on the *Pocotaligo River and tributaries* by SCDHEC and approved by USEPA. Additionally, revisions were made to three existing fecal coliform bacteria TMDLs approved by the USEPA in September 2005 to address other locations in tributaries of the Pocotaligo River (impaired sites **PD-098**, **PD-040**, and **PD-239**). Because South Carolina has recently adopted a change from fecal coliform bacteria to *Escherichia coli* (*E. coli*) bacteria as a recreational use standard in all freshwaters, the aforementioned sites will be included on future §303(d) lists due to exceedances of the current *E. coli* water quality standard until such time that sufficient *E. coli* data are collected and demonstrate the standard is attained or such time that TMDLs are developed and approved to address the parameter of concern. In addition to addressing fecal coliform bacteria impairments, this TMDL document also includes converted *E. coli* TMDLs for the purposes of implementation of the current recreational use standard.

The TMDL report identifies as probable sources of fecal contamination direct loading by livestock, failing septic systems, surrounding wildlife, and other agricultural activities. In order to achieve the target load for the Pocotaligo River and tributaries, the following reductions in the existing loads at the respective stations will be necessary: Brunson Swamp Creek (RS-03345) up to 39% reduction; Pocotaligo River (PD-202) up to 60%; Big Branch (RS-07192) up to 81%; Pocotaligo River (PD-115) up to 7%; tributary to Juneburn Branch (RS-08232) up to 86%; and Deep Creek (RS-03347) up to 18%. The September 2005 TMDLs were revised in June 2013 and the following reductions were deemed necessary: Turkey Creek (PD-098) up to 81%; Turkey Creek (PD-040) up to 88%; and Nasty Branch (PD-239) up to 35%.

Special Projects

Turkey Creek Watershed Based Plan

In 2012, Sumter County with the cooperation of the City of Sumter was awarded a 319 Grant to develop a comprehensive Watershed Based Plan for the Turkey Creek Watershed. Stakeholders were involved in producing the plan which focuses on reducing fecal coliform loads in Turkey Creek.

