

03060106-05
(Upper Three Runs)

General Description

Watershed 03060106-05 (formerly 03060106-100) is located in Aiken and Barnwell Counties and consists primarily of the **Upper Three Runs** and its tributaries. The watershed occupies 157,637 acres of the Sand Hills and Upper Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 62.0% forested land, 16.4% forested wetland (swamp), 14.2% agricultural land, 5.8% urban land, 0.8% barren land, 0.6% nonforested wetland (marsh), and 0.2% water. A map depicting this watershed is found in Appendix C, page C-34.

Upper Three Runs accepts drainage from Tarrants Millpond, Jackson Branch, Cedar Creek (Chapman Pond), Boggy Gut (Beulah Fork, Dicks Pond, Cooks Pond), Johnson Fork, Tinker Creek (Riley Pond, Reedy Branch, Mill Creek, McQueen Branch), Crouch Branch, Tims Branch, and Island Creek (Brent Lake) before draining into the Savannah River. There are a total of 316.1 stream miles and 342.7 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>
SV-680	BIO	FW	UPPER THREE RUNS AT S-02-113
SV-723	BIO	FW	CEDAR CREEK AT S-02-79
SV-324	W	FW	TIMS BRANCH AT SRS ROAD C
SV-325	INT	FW	UPPER THREE RUNS AT SRS ROAD A

Upper Three Runs – There are two SCDHEC monitoring stations along Upper Three Runs. At the upstream site (**SV-680**), aquatic life uses are fully supported based on macroinvertebrate community data. At the downstream site (**SV-325**), aquatic life uses are fully supported; however; there is a significant increasing trend in five-day biochemical oxygen demand. 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. There is a significant decreasing trend in pH. Significant decreasing trends in 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.

Cedar Creek (SV-723) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Tims Branch (SV-324) - Aquatic life and recreational uses are fully supported; however; there are significant increasing trends in five-day biochemical oxygen demand and decreasing trends in dissolved oxygen concentration. 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. There is a significant decreasing

trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
UPPER THREE RUNS TRIBUTARY USDOE WESTINGHOUSE SRS (F02, F05)	SC0000175 MAJOR INDUSTRIAL
TIMS BRANCH USDOE WESTINGHOUSE SRS (A11)	SC0000175 MAJOR INDUSTRIAL
TIMS BRANCH TRIBUTARY USDOE WESTINGHOUSE SRS (A1A, A01, M05)	SC0000175 MAJOR INDUSTRIAL
CROUCH BRANCH TRIBUTARY USDOE WESTINGHOUSE SRS (H02)	SC0000175 MAJOR INDUSTRIAL
MCQUEEN BRANCH USDOE WESTINGHOUSE SRS (H04, H07, S04)	SC0000175 MAJOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

<i>RECEIVING STREAM MUNICIPALITY RESPONSIBLE PARTY IMPLEMENTING PARTY</i>	<i>NPDES# MS4 PHASE MS4 SIZE</i>
UPPER THREE RUNS CITY OF AIKEN CITY OF AIKEN CITY OF AIKEN	SCR030301 PHASE II SMALL MS4
UPPER THREE RUNS UNINCORPORATED AREAS AIKEN COUNTY AIKEN COUNTY	SCR030302 PHASE II SMALL MS4

Nonpoint Source Management Program

Land Disposal Activities

Landfill Activities

<i>SOLID WASTE LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
TOWN OF NEW ELLENTON DUMP DOMESTIC	----- INACTIVE
TOWN OF JACKSON DUMP DOMESTIC	----- INACTIVE
THREE RIVERS TIRE PROCESSING TIRE PROCESSING	024202-5201 ACTIVE
THREE RIVERS REGIONAL MSW LANDFILL DOMESTIC	024202-1101 ACTIVE

THREE RIVERS SW PROCESSING FACILITY DOMESTIC	024202-2001 ACTIVE
THREE RIVERS MSW LANDFILL RD&S	024202-8001 INACTIVE
THREE RIVERS TIRE PROCESSING WTP	024202-5201 ACTIVE
SRS 200-F SITE INDUSTRIAL	025800-1601 ACTIVE
SRS IND. SW LANDFILL INDUSTRIAL	025500-1601 INACTIVE
SRS BURN ROAD CC LANDFILL INDUSTRIAL	025500-1201 INACTIVE
SRS SW LANDFILL INDUSTRIAL	025500-1602 INACTIVE
SRS Z-AREA SALTSTONE IND. SITE INDUSTRIAL	025500-1603 ACTIVE
SRS SANITARY LANDFILL DOMESTIC	025500-1102 INACTIVE

Land Application Sites

*LAND APPLICATION SYSTEM
FACILITY NAME*

*ND#
TYPE*

SPRAYFIELD TOWN OF NEW ELLENTON	ND0068454 DOMESTIC
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Mining Activities

*MINING COMPANY
MINE NAME*

*PERMIT #
MINERAL*

MABUS BROTHERS CONSTRUCTION CO. BIDDLE MINE	1607-03 SAND
GODARD & MCGAHEE ENTERPRISES WESSEL PIT	1610-03 SAND

Growth Potential

There is a moderate potential for growth in this watershed, which contains portions of the City of Aiken, the Towns of New Ellenton and Jackson, and the Savannah River Site. The City of Aiken is experiencing growth in a southwesterly direction toward the Savannah River Site. Growth is predominately residential; numerous subdivisions are being developed. Commercial centers are also being constructed in conjunction with the population growth and residential development. Aiken has the permit for expansion of Aiken County's Horse Creek Treatment Plant to handle potential growth. SC 19 (towards New Ellenton and SRS) and SC 302 (towards Augusta and SRS) are the major commercial corridors serving the residential communities. Growth is expected to continue south and southwest instead of in previously established areas. Industrial growth is expected to occur along SC 19 to New Ellenton and west towards North

Augusta, along the Horse Creek drainage. The Savannah River Site covers the lower half of the watershed. The Savannah River Site employs 25,000 people from nearby counties and is responsible for the overall growth in proximity to the site.

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