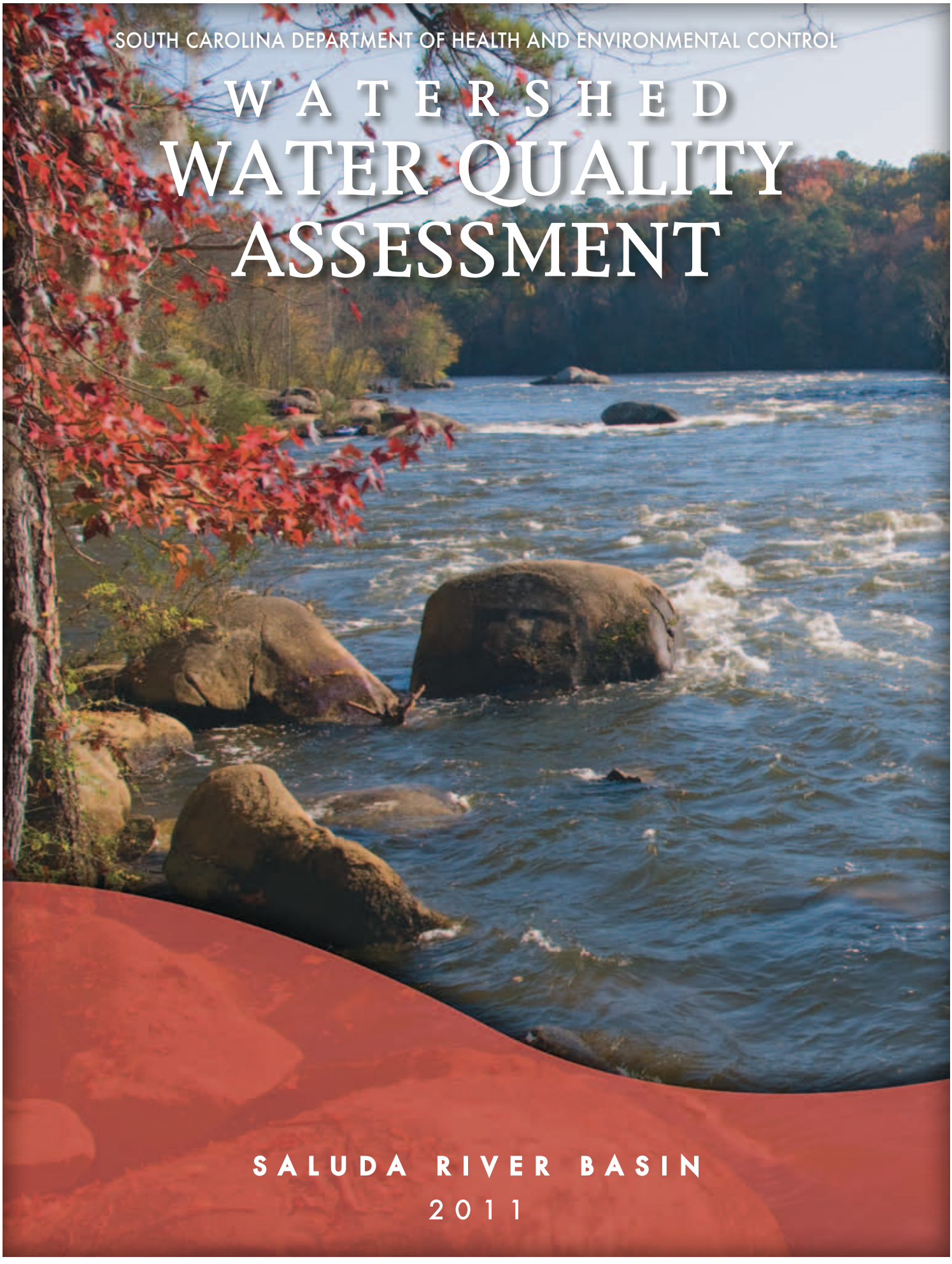

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

WATERSHED WATER QUALITY ASSESSMENT

SALUDA RIVER BASIN

2011

Watershed Water Quality Assessment

Saluda River Basin
2011

South Carolina Department of Health and Environmental Control

Bureau of Water

2600 Bull Street

Columbia, SC 29201

803-898-4300

www.scdhec.gov/water

PREFACE

In 1993, the South Carolina Department of Health and Environmental Control (SCDHEC) published the first in a series of five watershed management documents. The first in that series, Watershed Water Quality Management Strategy: Savannah-Salkehatchie Basin, communicated SCDHEC's innovative watershed approach, summarizing water programs and water quality in the basins. The approach continues to evolve and improve.

The watershed documents facilitate broader participation in the water quality management process. Through these publications, SCDHEC shares water quality information with internal and external partners, providing a common foundation for water quality improvement efforts at the local watershed or large-scale, often interstate, river basin level.

Water quality data from the Saluda River Basin was collected during 2002 through 2006 and assessed during this fourth, five-year watershed management cycle. This updated atlas provides summary information on a watershed basis, as well as geographical presentations of all permitted watershed activities. A waterbody index and facility indices allow the reader to locate information on specific waters and facilities of interest.

A brief summary of the water quality assessments included in the body of this document is provided following the Table of Contents. This summary lists all waters within the Saluda River Basin that fully support recreational and aquatic life uses, followed by those waters not supporting uses. In addition, the summaries list changes in use support status; those that have improved or degraded over the five years since the last assessment was written. More comprehensive information can be found in the individual watershed sections. The information provided is accurate to the best of our knowledge at the time of writing and will be updated in five years.

General information on Saluda River Basin Watershed Protection and Restoration Strategies can be found under that section on page 26, and more detailed information is located within the individual watershed evaluations.

A major change to this newest assessment is the use of the National Watershed Boundary dataset using the 8-, 10-, 12-Digit Hydrologic Unit Codes for South Carolina. This more accurate hydrologic unit code's use changes numerous boundaries in the basin and introduces a new numbering system for the watersheds. For comparison, each watershed evaluation will state the prior hydrologic code.

As SCDHEC continues basinwide and statewide water quality protection and improvement efforts, we are counting on the support and assistance of all stakeholders in the Saluda River Basin to participate in water quality improvements. We look forward to working with you.

If you have questions or comments regarding this document, or if you are seeking further information on the water quality in the Saluda Basin, please contact:

Watershed Manager, Saluda River Basin
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Columbia, SC 29201
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Water Quality Assessment Summary

Saluda River Basin

TERMS USED IN TABLES

AQUATIC LIFE USE SUPPORT (AL) - The degree to which aquatic life is protected is assessed by comparing important water quality characteristics and the concentrations of potentially toxic pollutants with standards. Aquatic life use support is based on the percentage of standards excursions at a sampling site.

For **dissolved oxygen** and **pH**:

If the percentage of standard excursions is 10% or less, then uses are ***fully supported***.

If the percentage of standard excursions is greater than 10% and less than or equal to 25%, then uses are ***partially supported***.

If the percentage of standard excursions is greater than 25%, uses are ***not supported*** (see p.12 for further information).

For **toxins** (heavy metals, priority pollutants, chlorine, ammonia):

If the chronic or acute aquatic life standard for any individual toxicant is not exceeded more than once, uses are ***fully supported***.

If the appropriate acute or chronic aquatic life standard is exceeded more than once (i.e. $\geq$ 2), but is less than or equal to 10% of the samples, uses are ***partially supported***.

If the appropriate acute or chronic aquatic life standard is exceeded more than once (i.e.$\geq$2), and is greater than 10% of the samples, aquatic life uses are ***not supported*** (see p.12 for further information).

For **turbidity** and waters with **numeric total phosphorus, total nitrogen, and chlorophyll-a**:

If the percentage of standard excursions is 25% or less, then uses are ***fully supported***.

If the percentage of standard excursions is greater than 25%, then uses are ***not supported*** (see p.13 for further information).

RECREATIONAL USE SUPPORT (REC) - The degree to which the swimmable goal of the Clean Water Act is attained (recreational use support) is based on the frequency of fecal coliform bacteria excursions, defined as greater than 400/100 ml for all surface water classes.

If 10% or less of the samples are greater than 400/100 ml, then recreational uses are said to be ***fully supported***.

If the percentage of standards excursions is greater than 10% and less than or equal to 25%, then recreational uses are said to be ***partially supported***.

If the percentage of standards excursions is greater than 25%, then recreational uses are said to be ***nonsupported*** (see p.14 for further information).

Excursion - The term excursion is used to describe a measurement that does not comply with the appropriate water quality standard.

Table 1. Fully Supported Sites in the Saluda River Basin 2002-2006

***** = Station not evaluated for Recreational Support; **=Station not evaluated for Aquatic Life Support; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006; Trend Data 1992-2006

Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050109-01	North Saluda Reservoir	S-292	Decreasing Fecal Coliform	Increasing BOD_5, pH
	North Saluda River	S-088	Decreasing Turbidity, Fecal Coliform	Increasing BOD_5; Decreasing Dissolved Oxygen
03050109-02	Table Rock Reservoir	S-291	Increasing Dissolved Oxygen; Decreasing Fecal Coliform	Increasing BOD_5, pH
	South Saluda River	S-320	Decreasing Turbidity, Total Phosphorus	Increasing BOD_5
	Matthews Creek	S-086*		
	South Saluda River	S-771*		
	Lake Oolenoy	RL-02307		
		S-798	Increasing Dissolved Oxygen	Increasing BOD_5
	Adams Creek	RS-02330		
	Middle Saluda River	S-076*		
		S-077	Increasing Dissolved Oxygen; Decreasing Turbidity	Increasing BOD_5
		RS-04530		
	Oil Camp Creek	S-317*		
	Carpenter Creek	S-980*		
03050109-03	Shoal Creek	S-991*		
		S-866*		
	Saluda Lake	RL-06427		
		RL-05401		
	Saluda River	S-007 [TD]		

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Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050109-04	Little Creek	S-985*		
03050109-05	Mountain Creek	S-859*		
	Lake Rabon-North Rabin Creek Arm	RL-05411		
		S-313		
	Lake Rabon	RL-02303		
		RL-03359		
		RL-02305		
		S-296	Decreasing Turbidity, Total Phosphorus	Increasing BOD_5, pH
	South Rabon Creek	S-860*		
	Lake Rabon-South Rabin Creek Arm	S-312		
	Rabon Creek	S-096 [TD,TI]	Decreasing Turbidity, Total Phosphorus	Increasing BOD_5
	Lake Greenwood-Rabon Creek Arm	S-307 [TD,TI]	Decreasing Turbidity, Total Phosphorus	
03050109-06	Martin Creek	S-986*		
	Reedy River	S-778*		
	Horse Creek	S-862*		
	Walnut Creek	S-987*		
	Walnut Creek	S-861*		

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Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050109-08	Mountain Creek	S-864*		
	Broad Mouth Creek	S-775*		
	Saluda River	S-125	Decreasing Turbidity	Increasing BOD_5, pH, Total Nitrogen; Decreasing Dissolved Oxygen
	Gibson Creek	S-989*		
	Lake Greenwood	S-131	Decreasing Fecal Coliform	Increasing BOD_5; Decreasing Dissolved Oxygen
		RL-04387		
	Lake Greenwood-Cane Creek Arm	S-097		Increasing Total Phosphorus; Decreasing Dissolved Oxygen
03050109-09	Little River	S-034 [TD]	Decreasing Total Nitrogen	
		S-100*		
03050109-10	Clouds Creek	S-255 [TD,TI]		Increasing BOD_5
03050109-12	Saluda River	S-295		Increasing BOD_5, Total Nitrogen
	Beaverdam Creek	S-852*		
	Bush River	S-851*		
	Lake Murray-Saluda River Arm	S-223	Decreasing Total Phosphorus	
03050109-13	Lake Murray	RL-05420		
		S-279	Decreasing Turbidity, Total Phosphorus, Total Nitrogen, Fecal Coliform	Increasing pH
		S-280	Decreasing Turbidity, Total Nitrogen	Increasing pH

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Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050109-13 (continued)	Lake Murray (continued)	RL-05418		
		RL-05410		
		RL-03338		
		RL-06440		
		S-273	Decreasing Turbidity, Total Phosphorus, Total Nitrogen, Fecal Coliform	Increasing BOD_5, pH
		S-274	Decreasing Turbidity, Total Phosphorus, Total Nitrogen, Fecal Coliform	Increasing pH
		RL-06442		
		S-204	Decreasing Turbidity, Total Phosphorus, Total Nitrogen, Fecal Coliform	Increasing pH
	Lake Murray –Buffalo Creek Arm	S-211	Increasing Dissolved Oxygen; Decreasing Total Phosphorus	Increasing pH
	Little Creek	S-978**		
	Hollow Creek	S-975**		
	Lake Murray-Hollow Creek Arm	S-974**		
		S-973**		
		RL-04372		
	Lake Murray –Camping Creek Arm	S-213	Decreasing Total Phosphorus	Increasing pH

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Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050109-13 (continued)	Lake Murray –High Hill Creek Arm	RL-03334		
	Lake Murray –Sixteenmile Creek Arm	RL-02316		
03050109-14	Saluda River	S-152	Increasing Dissolved Oxygen; Decreasing Total Phosphorus, Fecal Coliform	Increasing pH, Total Suspended Solids
		S-298	Increasing Dissolved Oxygen; Decreasing Turbidity, Total Phosphorus, Fecal Coliform	Increasing BOD_5, pH, Total Suspended Solids
03050110-01	Congaree Creek	C-565*		
	Red Bank Creek	C-580*		
		C-066	Decreasing Turbidity	
	Second Creek	C-583*		
	Savana Branch	C-061	Decreasing Total Phosphorus	Increasing pH
03050110-02	Forest Lake	C-068	Decreasing Turbidity	Increasing pH
03050110-03	Congaree River	S-955**		
		S-956*		
		S-957*		
		S-958*		
		S-994**		
		S-959*		
		S-960*		

Table 1. Fully Supported Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Improving Trends	Other Trends
03050110-03 (continued)	Congaree River (continued)	S-961*		
		S-995**		
		S-996**		
		S-965*		
	Sandy Run	C-009	Decreasing Fecal Colifom Bacteria	Increasing BOD_5
		S-971*		
	Big Beaver Creek	C-010*		
	Cedar Creek	C-069*	Decreasing Turbidity	
		C-075	Decreasing Total Phosphorus	Decreasing Dissolved Oxygen; Increasing BOD_5
03050110-04	Toms Creek	S-952**		
		S-951**		

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

REC=Recreational; AL=Aquatic Life; DW= Drinking Water; PS=Partially Supported Standards; NS=Nonsupported Standards; *=Station not evaluated for Recreational Support; **=Station not evaluated for Aquatic Life Support; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006; Trend Data 1992-2006

Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-01	North Saluda River	S-773*	AL	PS	Macroinvertebrates		
		S-004 TD	REC	NS	Fecal Coliform		Increasing BOD_5
03050109-02	South Saluda River	S-087 TD	REC	PS	Fecal Coliform	Decreasing Total Phosphorus	Increasing BOD_5, pH; Decreasing Dissolved Oxygen
		S-299 TD	REC	PS	Fecal Coliform	Increasing Dissolved Oxygen; Decreasing Total Phosphorus	Increasing BOD_5, Total Nitrogen
	Oolenoy River	S-103 TD	AL	PS	Macroinvertebrates	Increasing Dissolved Oxygen; Decreasing Turbidity, Total Phosphorus	Increasing BOD_5
			REC	PS	Fecal Coliform		
	Middle Saluda River	S-252 TD	REC	PS	Fecal Coliform		Increasing BOD_5, pH
03050109-03	Saluda Lake	S-250 TD	REC	PS	Fecal Coliform	Decreasing Turbidity	Increasing BOD_5, pH
		S-314	REC	PS	Fecal Coliform		Increasing BOD_5
		RL-03349	REC	PS	Fecal Coliform		
	Mill Creek	S-315 TD	AL	NS	Chromium	Decreasing Total Phosphorus	Increasing BOD_5, pH, Fecal Coliform
			REC	NS	Fecal Coliform		
	Georges Creek Tributary	S-005 TD	REC	NS	Fecal Coliform	Increasing Dissolved Oxygen; Decreasing Turbidity	Increasing pH
	Burdine Creek	RS-06151	AL	PS	Macroinvertebrates		
	Georges Creek	S-865*	AL	PS	Macroinvertebrates		

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-03 (continued)	Georges Creek (continued)	S-300 TD	AL	PS	Copper		Increasing BOD_5
			REC	NS	Fecal Coliform		
	Big Brushy Creek	S-301 TD	AL	PS	Macroinvertebrates		Increasing BOD_5, Total Phosphorus, Total Nitrogen
			REC	NS	Fecal Coliform		
	Saluda River Trib.	S-267 TD	REC	NS	Fecal Coliform	Decreasing Total Phosphorus	Increasing pH
	Grove Creek	S-171 TD	REC	PS	Fecal Coliform		Increasing BOD_5, pH
		S-774*	AL	PS	Macroinvertebrates		
		RS-02462	REC	PS	Fecal Coliform		
	Saluda River	S-119	REC	PS	Fecal Coliform	Decreasing Turbidity	Increasing BOD_5, Total Nitrogen
	Big Creek	S-302 TD	AL	PS	Macroinvertebrates	Decreasing Turbidity, Total Phosphorus, Total Nitrogen	
			REC	NS	Fecal Coliform		
03050109-04	Reedy River	S-073	REC	PS	Fecal Coliform		Increasing BOD_5, pH, Tot. Susp. Solids
		S-319	REC	NS	Fecal Coliform	Decreasing Turbidity, Total Phosphorus	Increasing BOD_5
		S-323	REC	NS	Fecal Coliform	Decreasing Turbidity, Total Nitrogen	Decreasing pH
		S-833*	AL	PS	Macroinvertebrates		
		S-072	REC	NS	Fecal Coliform	Decreasing Turbidity, Total Phosphorus, Fecal Coliform	

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-04 (Continued)	Reedy River	S-834*	AL	PS	Macroinvertebrates		
	Langston Creek	S-265*	AL	PS	Macroinvertebrates		
		S-264	REC	PS	Fecal Coliform	Decreasing Fecal Coliform	
	Richland Creek	S-981*	AL	PS	Macroinvertebrates		
	Brushy Creek	S-067	REC	NS	Fecal Coliform	Decreasing Fecal Coliform	Increasing BOD_5, Decreasing DO
		S-867*	AL	PS	Macroinvertebrates		
	Laurel Creek	S-139*	AL	PS	Macroinvertebrates		
	Reedy River Tributary	RS-06167	AL	PS	Macroinvertebrates		
			REC	NS	Fecal Coliform		
	Baldwin Creek	S-972*	AL	PS	Macroinvertebrates		
	Rocky Creek	S-091	AL	PS	Macroinvertebrates	Decreasing Total Phosphorus	Increasing pH
			REC	NS	Fecal Coliform		
	Harrison Creek	S-982*	AL	PS	Macroinvertebrates		
	Huff Creek	S-983*	AL	PS	Macroinvertebrates		
		S-863*	AL	PS	Macroinvertebrates		
		S-178	REC	NS	Fecal Coliform	Decreasing Total Phosphorus	Increasing BOD_5
	Baker Creek Tributary	S-984*	AL	PS	Macroinvertebrates		

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-05	North Rabon Creek	S-321 [TD,TI]	REC	NS	Fecal Coliform		Increasing BOD_5, pH
	South Rabon Creek	S-322 [TD,TI]	REC	PS	Fecal Coliform	Decreasing Fecal Coliform	Increasing BOD_5, pH
03050109-06	Reedy River	S-835*	AL	PS	Macroinvertebrates		
		S-070	REC	PS	Fecal Coliform	Increasing Dissolved Oxygen	Increasing BOD_5, pH
		S-021	REC	PS	Fecal Coliform	Decr. Turbidity, Total Phosphorus	Increasing BOD_5
	Boyd Mill Pond	RL-05403	AL	NS	pH, Total Phosphorus		
		S-311	AL	NS	pH, Total Phosphorus	Decreasing BOD_5, Total Phosphorus	Increasing Fecal Coliform; Decreasing Dissolved Oxygen
	Lake Greenwood-Reedy River Arm	S-308	AL	NS	pH, Total Phosphorus	Decreasing Total Phosphorus, Total Nitrogen	
		S-022	AL	NS	pH	Decreasing Turbidity	
03050109-07	Rocky Creek	RS-03346	AL	PS	Macroinvertebrates		
			REC	NS	Fecal Coliform		
	Coronaca Creek	S-092	REC	PS	Fecal Coliform		Increasing BOD_5, Turbidity; Decreasing Dissolved Oxygen, pH
	Wilson Creek	S-233	REC	NS	Fecal Coliform	Decreasing Turbidity	
		S-235	AL	PS	Macroinvertebrates		Increasing BOD_5
			REC	PS	Fecal Coliform		

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-07 (continued)	Ninety Six Creek	S-856*	AL	PS	Macroinvertebrates		
		S-093	AL	NS	Copper		Increasing BOD_5, pH, Total Phosphorus, Total Nitrogen; Decreasing Dissolved Oxygen
			REC	PS	Fecal Coliform		
03050109-08	Saluda River Tributary	RS-06030	REC	NS	Fecal Coliform		
	Mountain Creek Tributary	S-990*	AL	PS	Macroinvertebrates		
	Broad Mouth Creek	S-289 TD	REC	NS	Fecal Coliform	Increasing Dissolved Oxygen; Decreasing BOD_5, Total Phosphorus	Increasing Fecal Coliform
		RS-04364	AL	PS	Macroinvertebrates		
			REC	NS	Fecal Coliform		
		S-010 TD	REC	NS	Fecal Coliform	Increasing Dissolved Oxygen; Decreasing Total Phosphorus	Increasing pH
		S-304 TD	REC	NS	Fecal Coliform		Increasing BOD_5
	Turkey Creek	S-858*	AL	PS	Macroinvertebrates		
	Lake Greenwood	S-024	AL	PS	pH		Increasing BOD_5
		RL-02311	AL	PS	pH		
		S-303	AL	PS	Copper	Increasing Dissolved Oxygen	Increasing BOD_5

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-09	Little River	S-297 [TD]	REC	PS	Fecal Coliform		
		S-099 [TD]	REC	PS	Fecal Coliform		Increasing BOD_5
	North Creek	S-135 [TD]	REC	NS	Fecal Coliform		Increasing BOD_5
	Beaverdam Creek	RS-05400	REC	NS	Fecal Coliform		
	Mudlick Creek	RS-04526	REC	PS	Fecal Coliform		
03050109-10	Clouds Creek	S-324 [TD,TI]	REC	PS	Fecal Coliform	Decreasing BOD_5	
	West Creek	RS-05398 [TD,TI]	AL	PS	Macroinvertebrates		
			REC	NS	Fecal Coliform		
03050109-11	Little Saluda River	S-050 [TD,TI]	AL	NS	Dissolved Oxygen		
		S-123 [TD,TI]	AL	NS	Dissolved Oxygen		
			REC	PS	Fecal Coliform	Decreasing Turbidity, Total Nitrogen, Total Phosphorus, Fecal Coliform	Increasing BOD_5; Decreasing Dissolved Oxygen
	Big Creek	RS-05590	REC	NS	Fecal Coliform		
	Lake Murray-Little Saluda River Arm	S-222	AL	NS	pH, Total Phosphorus	Decreasing Total Nitrogen, Total Phosphorus	Decreasing pH
03050109-12	Saluda River	S-047	REC	PS	Fecal Coliform		Increasing BOD_5
	Lake Murray-Saluda River Arm	S-310	AL	NS	pH		Decreasing Dissolved Oxygen, pH

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-12 (continued)	Lake Murray-Bush River Arm	S-309	AL	NS	Total Phosphorus, Chlorophyll		Decreasing Dissolved Oxygen, pH
	Bush River	S-042	AL	NS	Dissolved Oxygen	Decreasing Turbidity, Total Nitrogen, Total Phosphorus, Fecal Coliform	Decreasing Dissolved Oxygen
		S-046 [TD,TI]	REC	NS	Fecal Coliform		
		S-102 [TD,TI]	REC	NS	Fecal Coliform		Increasing Total Phosphorus
	Scott Creek	S-044 [TD]	AL	PS	Dissolved Oxygen	Decreasing Fecal Coliform	Decreasing Dissolved Oxygen
			REC	NS	Fecal Coliform		
03050109-13	Lake Murray	S-212	AL	PS	pH	Decreasing Turbidity	Increasing pH
		CL-083	AL	NS	Copper		Increasing Fecal Coliform
	Hollow Creek	S-977**	REC	NS	Fecal Coliform		
		S-976**	REC	NS	Fecal Coliform		
		S-306 [TD]	REC	NS	Fecal Coliform		
	Camping Creek	S-290 [TD]	REC	PS	Fecal Coliform	Decreasing Turbidity, Fecal Coliform	Increasing pH
		S-850*	AL	PS	Macroinvertebrates		
03050109-14	Rawls Creek	S-287 [TD]	AL	NS	Macroinvertebrates Turbidity	Decreasing Turbidity	Increasing Total Suspended Solids
			REC	NS	Fecal Coliform		

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

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Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050109-14 (continued)	Saluda River	S-149 TD	AL	NS	Turbidity	Increasing Dissolved Oxygen	Increasing pH, Total Suspended Solids, Fecal Coliform
			REC	NS	Fecal Coliform		
	Lorick Branch	S-150 TD	AL	NS	Dissolved Oxygen	Decreasing Total Phosphorus	Increasing pH
			REC	NS	Fecal Coliform		
	Twelvemile Creek	S-052*	AL	PS	Macroinvertebrates		
		RS-02457	REC	NS	Fecal Coliform		
		S-294 TD	REC	NS	Fecal Coliform		Increasing pH, Fecal Coliform
	Fourteenmile Creek	S-848*	AL	PS	Macroinvertebrates		
	Kinley Creek	S-260 TD	AL	PS	Macroinvertebrates		Increasing Total Phosphorus, Total Suspended Solids; Decreasing Dissolved Oxygen
			REC	NS	Fecal Coliform		
03050110-01	Red Bank Creek	C-067 TD	REC	PS	Fecal Coliform	Decreasing Turbidity	
	Congaree Creek	C-008 TD	REC	NS	Fecal Coliform	Increasing Dissolved Oxygen; Decreasing Turbidity, Total Phosphorus	Increasing BOD_5, pH
		C-070	REC	PS	Fecal Coliform		Increasing BOD_5, Total Nitrogen; Decreasing Dissolved Oxygen
	Sixmile Creek - Lake Caroline	C-025 TD	REC	NS	Fecal Coliform	Decreasing Turbidity	

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

REC=Recreational; AL=Aquatic Life; DW= Drinking Water; PS=Partially Supported Standards; NS=Nonsupported Standards; *=Station not evaluated for Recreational Support; **=Station not evaluated for Aquatic Life Support; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006; Trend Data 1992-2006

Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050110-01 (continued)	Sixmile Creek	C-005 [TD]	AL	PS	Dissolved Oxygen		Increasing BOD_5, Total Nitrogen; Decreasing Dissolved Oxygen
			REC	PS	Fecal Coliform		Increasing Fecal Coliform
03050110-02	Gills Creek	C-001	REC	NS	Fecal Coliform	Decreasing Turbidity, Total Nitrogen, Total Phosphorus, Fecal Coliform	Increasing BOD_5, pH
		C-017	AL	PS	Dissolved Oxygen	Decreasing Turbidity, Total Phosphorus, Total Suspended Solids, Fecal Coliform	Increasing pH; Decreasing Dissolved Oxygen
			REC	NS	Fecal Coliform		
03050110-03	Broad River	B-080	REC	PS	Fecal Coliform	Decreasing Turbidity, Fecal Coliform	Increasing pH
	Congaree River	CSB-001R**	REC	PS	Fecal Coliform	Decreasing Fecal Coliform	
		CSB-001L**	REC	PS	Fecal Coliform	Decreasing Fecal Coliform	
		S-967*	AL	NS	Copper		
		C-074	REC	PS	Fecal Coliform		Increasing BOD_5; Decreasing Dissolved Oxygen
	Reeder Point Branch	C-073	REC	PS	Fecal Coliform	Decreasing BOD_5	Increasing pH
	Mill Creek	C-021	REC	PS	Fecal Coliform	Decreasing Total Phosphorus, Fecal Coliform; Increasing Dissolved Oxygen	
	Cedar Creek	C-071*	AL	PS	Macroinvertebrates		

Table 2. Impaired Sites in the Saluda River Basin 2002-2006

REC=Recreational; AL=Aquatic Life; DW= Drinking Water; PS=Partially Supported Standards; NS=Nonsupported Standards; *=Station not evaluated for Recreational Support; **=Station not evaluated for Aquatic Life Support; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006; Trend Data 1992-2006

Watershed	Waterbody Name	Station #	Use	Status	Water Quality Indicator	Improving Trends	Other Trends
03050110-04	Toms Creek	C-072	REC	PS	Fecal Coliform		Increasing BOD_5; Decreasing Dissolved Oxygen
		S-950	AL	PS	Macroinvertebrates		
			REC	PS	Fecal Coliform		
	Buckhead Creek	RS-04521	AL	PS	Macroinvertebrates		
	Congaree River	C-007	AL	NS	Copper	Decreasing Total Phosphorus	Increasing BOD_5, pH, Total Nitrogen
			REC	PS	Fecal Coliform		

Table 3. Changes in Use Support Status

Saluda River Basin Sites that Improved from 2002 to 2006

REC= Recreational; AL=Aquatic Life; FS=Fully Supported Standards; PS=Partially Supported Standards; NS=Nonsupported Standards; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006

Watershed	Waterbody Name	Station #	Use	Status		Water Quality Indicator	
				2002	2006	2002	2006
03050109-01	North Saluda River	S-773	AL	NS	PS	Macroinvertebrates	Macroinvertebrates
		S-004[TD]	AL	PS	FS	Macroinvertebrates	
03050109-02	Middle Saluda River	S-077	AL	NS	FS	Copper	
03050109-03	Saluda River	S-007 [TD]	REC	PS	FS	Fecal Coliform	
	Grove Creek	S-171 [TD]	REC	NS	PS	Fecal Coliform	Fecal Coliform
03050109-04	Reedy River	S-073	REC	NS	PS	Fecal Coliform	Fecal Coliform
		S-323	AL	NS	FS	Copper	
	Langston Creek	S-264	REC	NS	PS	Fecal Coliform	Fecal Coliform
03050109-05	South Rabon Creek	S-322 [TD,TI]	REC	NS	PS	Fecal Coliform	Fecal Coliform
	Rabon Creek	S-096 [TD,TI]	REC	PS	FS	Fecal Coliform	
	Rabon Creek Arm of Lake Greenwood	S-307 [TD,TI]	AL	PS	FS	pH	
03050109-06	Reedy River	S-778	AL	PS	FS	Macroinvertebrates	
03050109-07	Coronaca Creek	S-092	AL	NS	FS	Dissolved Oxygen, pH	
03050109-08	Saluda River	S-125	REC	PS	FS	Fecal Coliform	
	Lake Greenwood	S-131	AL	NS	FS	Total Phosphorus	
	Cane Creek Arm of Lake Greenwood	S-097	AL	NS	FS	Dissolved Oxygen, Total Phosphorus	
03050109-09	Little River	S-034 [TD]	REC	NS	FS	Fecal Coliform	
		S-297 [TD]	REC	NS	PS	Fecal Coliform	Fecal Coliform
03050109-10	Clouds Creek	S-255 [TD,TI]	AL	NS	FS	Dissolved Oxygen, pH	
		S-324 [TD,TI]	AL	PS	FS	pH	
03050109-11	Little Saluda River	S-050 [TD,TI]	REC	NS	FS	Fecal Coliform	
03050109-12	Saluda River	S-295	AL	NS	FS	Copper	
		S-047	AL	PS	FS	pH	
	Beaverdam Creek	S-852	AL	PS	FS	Macroinvertebrates	

Saluda River Basin Sites that Improved from 2002 to 2006

REC= Recreational; AL=Aquatic Life; FS=Fully Supported Standards; PS=Partially Supported Standards; NS=Nonsupported Standards; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006

Watershed	Waterbody Name	Station #	Use	Status		Water Quality Indicator	
				2002	2006	2002	2006
03050109-12 (continued)	Saluda River Arm of Lake Murray	S-310	AL	NS	PS	pH	
		S-223	AL	NS	FS	Total Phosphorus, pH	
03050109-13	Lake Murray	S-279	AL	NS	FS	Total Phosphorus, pH	
	Buffalo Creek Arm of Lake Murray	S-211	AL	PS	FS	pH	
	Hollow Creek	S-306 TD	AL	PS	FS	pH	
03050109-14	Saluda River	S-152	AL	PS	FS	Dissolved Oxygen,pH	
03050110-01	Savana Branch	C-061	REC	PS	FS	Fecal Coliform	
	Lake Caroline (Sixmile Creek)	C-025 TD	AL	NS	FS	Total Phosphorus	
	Sixmile Creek	C-005 TD	REC	NS	PS	Fecal Coliform	Fecal Coliform
03050110-03	Reeder Point Branch	C-073	AL	NS	FS	Dissolved Oxygen,pH	
			REC	NS	PS	Fecal Coliform	Fecal Coliform

Table 4. Changes in Use Support Status

Saluda River Basin Sites that Degraded from 2002 to 2006

REC= Recreational; AL=Aquatic Life; FS=Fully Supported Standards; PS=Partially Supported Standards; NS=Nonsupported Standards; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006

Watershed	Waterbody Name	Station #	Use	Status		Water Quality Indicator	
				2002	2006	2002	2006
03050109-02	Middle Saluda River	S-252	REC	FS	PS		Fecal Coliform
	Oolenoy River	S-103	AL	FS	PS		Macroinvertebrates
03050109-03	Saluda Lake	S-314	REC	FS	PS		Fecal Coliform
	Saluda River Trib.	S-267 TD,TI	REC	PS	NS	Fecal Coliform	Fecal Coliform
	Saluda River	S-119	REC	FS	PS		Fecal Coliform
	Georges Creek	S-865	AL	FS	PS		Macroinvertebrates
		S-300 TD	AL	FS	PS		Copper
	Big Brushy Creek	S-301 TD	REC	PS	NS	Fecal Coliform	Fecal Coliform
	Big Creek	S-302 TD	AL	FS	PS		Macroinvertebrates
			REC	FS	NS		Fecal Coliform
03050109-04	Reedy River	S-072	REC	PS	NS	Fecal Coliform	Fecal Coliform
03050109-06	Reedy River	S-021	REC	FS	PS		Fecal Coliform
03050109-07	Ninety Six Creek	S-093	AL	FS	NS		Copper
			REC	FS	PS		Fecal Coliform
	Coronaca Creek	S-092	REC	FS	PS		Fecal Coliform
	Wilson Creek	S-233	REC	FS	NS		Fecal Coliform
		S-235	REC	FS	PS		Fecal Coliform
03050109-08	Broad Mouth Creek	S-304 TD	REC	PS	NS	Fecal Coliform	Fecal Coliform
	Lake Greenwood	S-303	AL	FS	PS		Copper
03050109-09	Little River	S-099 TD	REC	FS	PS		Fecal Coliform
03050109-10	Clouds Creek	S-324 TD,TI	REC	FS	PS		Fecal Coliform
03050109-11	Little Saluda River	S-123 TD,TI	REC	FS	PS		Fecal Coliform

Saluda River Basin Sites that Degraded from 2002 to 2006

REC= Recreational; AL=Aquatic Life; FS=Fully Supported Standards; PS=Partially Supported Standards; NS=Nonsupported Standards; TD=TMDL Developed; TI=TMDL Implementation; TI*=TMDL Implementation after 2006

Watershed	Waterbody Name	Station #	Use	Status		Water Quality Indicator	
				2002	2006	2002	2006
03050109-12	Saluda River	S-047	REC	FS	PS		Fecal Coliform
	Bush River	S-046 TD,TI	REC	PS	NS	Fecal Coliform	Fecal Coliform
	Bush River	S-102 TD,TI	REC	PS	NS	Fecal Coliform	Fecal Coliform
	Scott Creek	S-044 TD	AL	FS	PS		Dissolved Oxygen
03050109-13	Lake Murray	CL-083	AL	PS	NS	pH	Copper
03050109-14	Saluda River	S-149 TD	AL	PS	NS	Dissolved Oxygen	Turbidity
			REC	PS	NS	Fecal Coliform	Fecal Coliform
	Rawls Creek	S-287 TD	AL	FS	NS		Macroinvertebrates, Turbidity
	Lorick Branch	S-150 TD	AL	FS	NS		Dissolved Oxygen
	Twelvemile Creek	S-294 TD	REC	PS	NS	Fecal Coliform	Fecal Coliform
03050110-01	Congaree Creek	C-008 TD	REC	FS	NS		Fecal Coliform
		C-070	REC	FS	PS		Fecal Coliform
03050110-02	Gills Creek	C-017	REC	PS	NS	Fecal Coliform	Fecal Coliform
03050110-03	Congaree River	CSB-001R	REC	FS	PS		Fecal Coliform
		C-074	REC	FS	PS		Fecal Coliform
	Cedar Creek	C-071	AL	FS	PS		Macroinvertebrates
03050110-04	Congaree River	C-007	AL	FS	NS		Copper
			REC	FS	PS		Fecal Coliform

Introduction

The South Carolina Department of Health and Environmental Control (SCDHEC) initiated its first watershed planning activities as a result of a U.S. Environmental Protection Agency (USEPA) grant in June of 1972. These activities were soon extended by requirements for a Continuing Planning Process under §303(e), "Federal Water Pollution Control Act Amendments of 1972," U.S. Public Law 92-500. In 1975, the SCDHEC published basin-planning reports for the four major basins in South Carolina. A related planning activity resulted from §208 of the Federal Water Pollution Control Act, which required states to prepare planning documents on an areawide basis. The Continuing Planning Process, watershed assessments, and 208 plans are elements of South Carolina's overall water quality management plan. In 1992, SCDHEC's Bureau of Water initiated its Watershed Water Quality Management program to better coordinate river basin planning and water quality management. Watershed-based management allows SCDHEC to address Congressional and Legislative mandates in a coordinated manner and to better utilize current resources. The watershed approach also improves communication between SCDHEC, the regulated community, and the public on existing and future water quality issues.

Purpose of the Watershed Water Quality Assessment

A watershed is a geographic area into which the surrounding waters, sediments, and dissolved materials drain, and whose boundaries extend along surrounding topographic ridges. Watershed-based water quality management recognizes the interdependence of water quality related activities associated with a drainage basin including: monitoring, problem identification and prioritization, water quality modeling, planning, permitting, and other activities. The Bureau of Water's watershed approach integrates these and other activities by watershed, resulting in appropriately focused water quality protection efforts. While an important aspect of the program is water quality problem identification and solution, the emphasis is on problem prevention.

SCDHEC has divided the State into five regions (areas consisting of one or more river basins), along hydrologic lines, which contain approximately the same number of NPDES permitted dischargers. A Watershed Water Quality Assessment (WWQA) will be created for each major river basin within the five regions and will be updated on a five-year rotational basis. This will allow for effective allocation and coordination of water quality activities and efficient use of available resources. SCDHEC's Saluda River Basin is subdivided into 18 watersheds or hydrologic units within South Carolina, which include the Saluda River Basin and the Congaree River Basin. The Saluda River Basin is subdivided into 14 watersheds and includes the North and South Saluda Rivers, the Saluda River, the Reedy River, Rabon Creek, Ninety Six Creek, Lake Greenwood, the Little River, the Little Saluda River, Clouds Creek, and Lake Murray. The Congaree River Basin is subdivided into 4 watersheds and includes Congaree Creek, Gills Creek, and the Congaree River.

The Saluda River and the Broad River join to form the Congaree River. The Broad River Basin will be updated in year 5 of the basin cycle.

The hydrologic units are based on the National Watershed Boundary dataset using the 8-, 10-, 12-Digit Hydrologic Unit Codes for South Carolina. All water quality related evaluations for the Saluda River Basin are described at the 10-digit watershed level. The stream names used are derived from USGS topographic maps. The National Hydrography Dataset (NHD) served as the basemap for streams and lakes. The dataset was used to calculate stream length estimates, and lake acreages. NHD is the digital database of the USGS 1:24,000 scale hydrography, integrated with reach (stream) related information from the USEPA. Based on the blue line streams of the USGS topographic maps, it is likely that portions of the stream network in terms of perennial, intermittent, and ephemeral streams are not accurately represented.

The watershed-based assessments fulfill a number of USEPA reporting requirements including various activities under §303(d), §305(b), §314, and §319 of the Clean Water Act (CWA). Section 303(d) requires a listing of waters located within a watershed that do not meet applicable water quality standards. Section 305(b) requires that the State biennially submit a report that includes a water quality description and analysis of all navigable waters to estimate environmental impacts. Section 314 requires that the State submit a biennial report that identifies, classifies, describes, and assesses the status and trends in water quality of publicly owned lakes. The watershed plan is also a logical evaluation, prioritization, and implementation tool for nonpoint source (§319) requirements. Nonpoint source best management practices (BMPs) can be selected by identifying water quality impairments and necessary controls, while considering all the activities occurring in the drainage basin.

The assessment also allows for more efficient issuance of National Pollutant Discharge Elimination System (NPDES) and State wastewater discharge permits. Proposed permit issuances within a watershed may be consolidated and presented to the public in groups, rather than one at a time, allowing SCDHEC to realize a resource savings and the public to realize an information advantage.

The Watershed Water Quality Assessment (WWQA) is a geographically based document that describes, at the watershed level, water quality related activities that may potentially have an adverse impact on water quality. The Watershed Implementation Staff investigates the impaired streams mentioned in the WWQA to determine, where possible, the source of the impairment and recommends solutions to correct the problems. As part of this effort, the watershed staff is forging partnerships with various federal and state agencies, local governments, and community groups. In particular, SCDHEC's Watershed Program and the NRCS (Natural Resources Conservation Service) district offices are working together to address some of the nonpoint source (NPS) concerns in the basin. By combining NRCS's local knowledge of land use and SCDHEC's knowledge of water quality, we are able to build upon NRCS's close relationships with landowners and determine where NPS projects are needed. These projects may include educational campaigns or special water quality studies.

Factors Assessed in Watershed Evaluations

Surface Water Quality

SCDHEC's Bureau of Water and Bureau of Environmental Services work to ensure that the water in South Carolina is safe for drinking and recreation, and that it is suitable to support and maintain aquatic flora and fauna. Functions include planning, permitting, compliance assurance, enforcement, and monitoring. This section provides an overview of water quality evaluation and protection activities.

Monitoring

In an effort to evaluate the State's water quality, SCDHEC operates and collects data from a statewide network of ambient monitoring sites. The ambient monitoring network is directed toward determining long-term water quality trends, assessing attainment of water quality standards, identifying locations in need of additional attention, and providing background data for planning and evaluating stream classifications and standards.

Ambient monitoring data are also used in the process of formulating permit limits for wastewater discharges with the goal of maintaining State and Federal water quality standards and criteria in the receiving streams in accordance with the goals of the Clean Water Act. These standards and criteria define the instream chemical concentrations that provide for protection and reproduction of aquatic flora and fauna, help determine support of the classified uses of each waterbody, and serve as instream limits for the regulation of wastewater discharges or other activities. In addition, by comparing the ambient monitoring network data to the State Water Quality Standards, these data are used in the preparation of the biennial §305(b) report to Congress, which provides a general summary of statewide water quality, and the §303(d) list of impaired waters with respect to attainment of classified uses.

There are several major components to SCDHEC's ambient surface water quality monitoring activities, including ongoing fixed-location monitoring, cyclic watershed monitoring, and statewide probability-based monitoring, each designed to provide data for water quality assessment of major water resource types at different spatial and temporal scales. In addition to sites sampled specifically as part of the cyclical watershed activities (W), the ambient surface water quality monitoring program includes several different monitoring station types: Integrator (INT), Special Purpose (SPRP), Summer-Only (SUMM), Random Stream for year ## (RS##), Random Lake for year ## (RL##), Random Tide Creek for year ## (RT##), Random Open Water for year ## (RO##), biological (BIO) stations. Special Study Sites (SSS) are designed to investigate specific activities at a station.

Integrator Sites are fixed-location sites sampled on a monthly basis, year-round, every year, and target the furthest downstream access of each of the 10-digit watershed units in the state, as well as the major waterbodies that occur within these watershed units. Special Purpose Sites are also

permanent, monthly, year-round, fixed-location sites, but represent locations of special interest to SCDHEC that do not meet the location criteria of Integrator Sites.

Summer-Only stations are sampled monthly from May through October, a period critical to aquatic life, and characterized by higher water temperatures and lower flows. There are very few Summer-Only Sites as they are intended to track specific reservoir eutrophication concerns.

Watershed stations (W) are sampled on a monthly basis, year-round, during a basin's target year. Watershed stations are located to provide more complete and representative coverage within the larger drainage basin, and to identify additional monitoring needs. Watershed stations have the same parameter coverage as Integrator Sites. Watershed stations are locations with extensive historic monitoring data (e.g. primary or secondary monitoring sites under the previous design). Changes in water quality can be identified by comparison of the new data to the historic data.

A statewide Probability-Based, or random sampling, component is part of the monitoring design. A probability-based monitoring design is a type of a survey design in which the population of interest is sampled in a fashion that allows statements to be made about the whole population based on a subsample, and produces an estimate of the accuracy of the assessment results. The advantage of the probability-based sampling design is that statistically valid statements about water quality can be made about large areas based on a relatively small subsample. Separate monitoring schemes have been developed for stream, lake/reservoir, and estuarine resources. Each year a new statewide set of probability-based random sites is selected for each waterbody type. Random Sites are sampled on a monthly basis for one year with the same parameter coverage as Integrator Sites. The data from those Random Sites located within this basin are included in this assessment.

Ambient biological trend monitoring is conducted to collect data to indicate general biological conditions of State waters that may be subject to a variety of point and nonpoint source impacts. Ambient biological sampling is also used to establish regional reference or "least impacted" sites from which to make comparisons in future monitoring. Additionally, special macroinvertebrate studies, in which stream specific comparisons among stations located upstream and downstream from a known discharge or nonpoint source area, are used to assess impact.

Qualitative sampling of macroinvertebrate communities is the primary bioassessment technique used in ambient biological trend monitoring. A habitat assessment of general stream habitat availability and a substrate characterization is conducted at each site. Annual ambient biological monitoring is conducted during low flow "worst case" conditions in July - September. Some coastal plain streams that have no flow conditions in the summer months may be sampled in the winter (January-March). This technique may also be used in special studies for the purpose of determining if, and to what extent, a wastewater discharge or nonpoint source runoff is impacting the receiving stream. A minimum of two sample locations, one upstream and one downstream from a discharge or runoff area, is collected. At least one downstream recovery station is also established when appropriate. Sampling methodology follows procedures described in Standard Operating Procedures, Biological Monitoring. Only sites described as 'BIO' will collect information on the macroinvertebrate communities used in the ambient biological trend monitoring.

Many pollutants may be components of point source discharges, but may be discharged in a discontinuous manner, or at such low concentrations that water column sampling for them is impractical. Some pollutants are also common in nonpoint source runoff, reaching waterways only after a heavy rainfall; therefore, in these situations, the best media for the detection of these chemicals are sediment and fish tissue where they may accumulate over time. Their impact may also affect the macroinvertebrate community.

The ambient monitoring program has the capability of sampling a wide range of media and analyzing them for the presence or effects of contaminants. Ambient monitoring data (2002-2006) and trend data (1992- 2006) from 171 stations were reviewed for the Saluda River Basin and 43 from the Congaree River Basin.

Natural Swimming Areas

Although all waters of the State are protected for swimming, some areas are more popular than others and may require closer monitoring. Currently monitored areas are located and discussed in the appropriate watershed evaluations.

Classified Waters, Standards, and Natural Conditions

The waters of the State have been classified in regulation based on the desired uses of each waterbody. The South Carolina water quality standards are promulgated in S.C. Regulation 61-68, *Water Classifications and Standards*. S.C. Regulation 61-69, *Classified Waters,* is a compilation of many of the waters of the State listed by name, the county(ies) where the waterbody is located, the classification of the waterbody and any designation for that waterbody, and a brief description of the waterbody and any site-specific numeric criteria that apply to the listed waterbody. State standards for various parameters have been established to protect all uses within each classification. The water-use classifications that apply to this basin are as follows.

Class ONRW, or "outstanding resource waters", are freshwaters or saltwaters which constitute an outstanding national recreational or ecological resource.

Class ORW, or "outstanding resource waters", are freshwaters or saltwaters that constitute an outstanding recreational or ecological resource, or those freshwaters suitable as a source for drinking water supply purposes, with treatment levels specified by SCDHEC.

Class FW, or "freshwaters", are freshwaters that are suitable for primary and secondary contact recreation and as a source for drinking water supply, after conventional treatment, in accordance with the requirements of SCDHEC. These waters are suitable for fishing, and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. This class is also suitable for industrial and agricultural uses.

Class Trout Waters is comprised of three types of water:
trout natural waters, which are freshwaters suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora,

trout put, grow and take waters, which are freshwaters suitable for supporting the growth of stocked trout populations and a balanced indigenous aquatic community of fauna and flora,
trout put and take waters, which are freshwaters protected by the standards of Class FW.

Class GB, or "groundwaters", include all groundwaters of the State, unless classified otherwise, which meet the definition of underground sources of drinking water.

Site specific numeric standards (*) for surface waters may be established by SCDHEC to replace the numeric standards found in Regulation 61-68 or to add new standards not contained in R.61-68. Establishment of such standards shall be subject to public participation and administrative procedures for adopting regulations. In addition, such site specific numeric standards shall not apply to tributary or downstream waters unless specifically described in the water classification listing in R.61-69.

The standards are used as instream water quality goals to maintain and improve water quality and also serve as the foundation of the Bureau of Water's program. They are used to determine permit limits for treated wastewater dischargers and any other activities that may impact water quality. Using mathematical Wasteload Allocation Models, the impact of a wastewater discharge on a receiving stream is predicted under critical conditions following R.61-68. These predictions are then used to set limits for different pollutants on the National Pollutant Discharge Elimination System (NPDES) permits issued by SCDHEC. The NPDES permit limits are set so that, as long as a permittee (wastewater discharger) meets the established permit limits, the discharge should not cause a standards violation in the receiving stream. All discharges to the waters of the State are required to have an NPDES permit and must abide by those limits, under penalty of law.

Classifications are based on desired uses, not on natural or existing water quality, and are a legal means to obtain the necessary treatment of discharged wastewater to protect designated uses. Actual water quality may not have a bearing on a waterbody's classification. A waterbody may be reclassified if desired or existing public uses justify the reclassification and the water quality necessary to protect these uses is attainable. A classification change is an amendment to a State regulation and requires public participation, SCDHEC Board approval, and General Assembly approval.

Natural conditions may prevent a waterbody from meeting the water quality goals as set forth in the standards. The fact that a waterbody does not meet the specified numeric standards for a particular classification does not mean the waterbody is polluted or of poor quality. Certain types of waterbodies (i.e. swamps, lakes, tidal creeks) may naturally have water quality lower than the numeric standards. A waterbody can have water quality conditions below standards due to natural causes and still meet its use classification. A site specific numeric standard may be established by SCDHEC after being subjected to public participation and administrative procedures for adopting regulations. Site specific numeric standards apply only to the stream segment described in the water classification listing, not to tributaries or downstream unspecified waters.

Water Quality Indicators

Water quality data are used to describe the condition of a waterbody, to help understand why that condition exists, and to provide some clues as to how it may be improved. Water quality indicators include physical, chemical, and biological measurements. The current State of S.C. Monitoring Strategy describes what parameters are sampled, where they are sampled, and how frequently. It is available on our website at www.scdhec.gov/environment/water/docs/strategy.pdf .

MACROINVERTEBRATE COMMUNITY

Macroinvertebrates are aquatic insects and other aquatic invertebrates associated with the substrates of waterbodies (including, but not limited to, streams, rivers, tidal creeks, and estuaries). Macroinvertebrates can be useful indicators of water quality because these communities respond to integrated stresses over time that reflect fluctuating environmental conditions. Community responses to various pollutants (i.e. organic, toxic, and sediment) may be assessed through interpretation of diversity, known organism tolerances, and in some cases, relative abundances and feeding types.

FISH TISSUE

Many pollutants occur in such low concentrations in the water column that they are usually below analytical detection limits. Over time many of these chemicals may accumulate in fish tissue to levels that are easily measured. By analyzing fish tissue it is possible to see what pollutants may be present in waterbodies at very low levels. This information can also be used to determine if consumption of the fish poses any undue human health concerns and to calculate consumption rates that are safe.

DISSOLVED OXYGEN

Oxygen is essential for the survival and propagation of aquatic organisms. If the amount of oxygen dissolved in water falls below the minimum requirements for survival, aquatic organisms or their eggs and larvae may die. A severe example is a fish kill. Dissolved oxygen (DO) varies greatly due to natural phenomena, resulting in daily and seasonal cycles. Different forms of pollution also can cause declines in DO.

Changes in DO levels can result from temperature changes or the activity of plants and other organisms present in a waterbody. The natural diurnal (daily) cycle of DO concentration is well documented. Dissolved oxygen concentrations are generally lowest in the morning, climbing throughout the day due to photosynthesis and peaking near dusk, then steadily declining during the hours of darkness.

There is also a seasonal DO cycle in which concentrations are greater in the colder, winter months and lower in the warmer, summer months. Streamflow (in freshwater) is generally lower during the summer and fall, and greatly affects flushing, reaeration, and the extent of saltwater intrusion, all of which affect dissolved oxygen values.

BIOCHEMICAL OXYGEN DEMAND

Five-day biochemical oxygen demand (BOD_5) is a measure of the amount of dissolved oxygen consumed by the decomposition of carbonaceous and nitrogenous matter in water over a five-day period. The BOD_5 test indicates the amount of biologically oxidizable carbon and nitrogen that is present in wastewater or in natural water. Matter containing carbon or nitrogen uses dissolved oxygen from the water as it decomposes, which can result in a dissolved oxygen decline. The quantity of BOD_5 discharged by point sources is limited through the National Pollutant Discharge Elimination System (NPDES) permits issued by SCDHEC. The discharge of BOD_5 from a point source is restricted by the permits so as to maintain the applicable dissolved oxygen standard.

pH

pH is a measure of the hydrogen ion concentration of water, and is used to indicate degree of acidity. The pH scale ranges from 0 to 14 standard units (SU). A pH of 7 is considered neutral, with values less than 7 being acidic, and values greater than 7 being basic.

Low pH values are found in natural waters rich in dissolved organic matter, especially in Coastal Plain swamps and black water rivers. The tannic acid released from the decomposition of vegetation causes the tea coloration of the water and low pH. High pH values in lakes during warmer months are associated with high phytoplankton (algae) densities. The relationship between phytoplankton and daily pH cycles is well established. Photosynthesis by phytoplankton consumes carbon dioxide during the day, which results in a rise in pH. In the dark, phytoplankton respiration releases carbon dioxide. In productive lakes, carbon dioxide decreases to very low levels, causing the pH to rise to 9-10 SU.

FECAL COLIFORM BACTERIA

Fecal coliform bacteria are present in the digestive tract and feces of all warm-blooded animals, including humans, poultry, livestock, and wild animal species. Fecal coliform bacteria are themselves generally not harmful, but their presence indicates that surface waters may contain pathogenic microbes. Diseases that can be transmitted to humans through water contaminated by improperly treated human or animal waste are the primary concern. At present, it is difficult to distinguish between waters contaminated by animal waste and those contaminated by human waste.

Public health studies have established correlations between fecal coliform numbers in recreational and drinking waters and the risk of adverse health effects. Based on these relationships, the USEPA and SCDHEC have developed enforceable standards for surface waters to protect against adverse health effects from various recreational or drinking water uses. Proper waste disposal or sewage treatment prior to discharge to surface waters minimizes this type of pollution.

NUTRIENTS

Oxygen demanding materials and plant nutrients are common substances discharged to the environment by man's activities, through wastewater facilities and by agricultural, residential, and stormwater runoff. The most important plant nutrients, in terms of water quality, are phosphorus and nitrogen. In general, increasing nutrient concentrations are undesirable due to the potential for accelerated growth of aquatic plants, including algae.

The forms of nitrogen routinely analyzed at SCDHEC stations are ammonia and ammonium nitrogen (NH_3/NH_4), total Kjeldahl nitrogen (TKN), and nitrite and nitrate nitrogen (NO_2/NO_3). Ammonia and ammonium are readily used by plants. TKN is a measure of organic nitrogen and ammonia in a sample. Nitrate is the product of aerobic transformation of ammonia, and is the most common form used by aquatic plants. Nitrite is usually not present in significant amounts. Total nitrogen is the sum of TKN and NO_2/NO_3.

Total phosphorus (TP) is commonly measured to determine phosphorus concentrations in surface waters. TP includes all of the various forms of phosphorus (organic, inorganic, dissolved, and particulate) present in a sample.

CHLOROPHYLL *a*

Nuisance plant growth can create imbalances in the aquatic community, as well as aesthetic and access issues. Invasive growth of rooted aquatic vegetation can clog boat motors and create disagreeable conditions for swimming and water skiing. High densities of microscopic algae (phytoplankton) can cause wide fluctuations in pH and dissolved oxygen, and can cause undesirable shifts in the composition of aquatic life, or even fish kills. Chlorophyll *a* is a dominant photosynthetic pigment in plants and is used as an indicator of the density of phytoplankton in the water column. The process of cultural eutrophication, from increased plant nutrients, is particularly noticeable in lakes. Continuous flushing in streams prevents the development of significant phytoplankton populations and the resultant chemical changes in water quality.

TURBIDITY

Turbidity is an expression of the scattering and absorption of light through water. The presence of clay, silt, fine organic and inorganic matter, soluble colored organic compounds, and plankton and other microscopic organisms increases turbidity. Increasing turbidity can be an indication of increased runoff from land. It is an important consideration for drinking water as finished water has turbidity limits.

TOTAL SUSPENDED SOLIDS

Total Suspended Solids (TSS) are the suspended organic and inorganic particulate matter in water. Although increasing TSS can also be an indication of increased runoff from land, TSS differs from turbidity in that it is a measure of the mass of material in, rather than light transmittance

through, a water sample. High TSS can adversely impact fish and fish food populations and damage invertebrate populations. There are no explicit State standards for TSS.

HEAVY METALS

Concentrations of cadmium, chromium, copper, lead, mercury, and nickel in water are routinely measured by SCDHEC to compare to State standards intended to protect aquatic life and human health. These metals occur naturally in the environment, and many are essential trace elements for plants and animals. Human activities, such as land use changes and industrial and agricultural processes have resulted in an increased flux of metals from land to water. Atmospheric inputs are also recognized as important sources of metals to aquatic systems. Metals are released to the atmosphere from the burning of fossil fuels (coal, oil, gasoline), wastes (medical, industrial, municipal), and organic materials. The metals are then deposited on land and in waterways from the atmosphere via rainfall and attached to particulates (dry deposition).

Assessment Methodology

The Watershed Water Quality Assessment is a geographically-based document that describes, at the watershed level, water quality as well as conditions and activities related to water quality. This section provides an explanation of the information assessment methodology used to generate the watershed-level summaries. Water quality data summaries used in this assessment are presented in Appendices A and B.

USE SUPPORT DETERMINATION

Physical, chemical and biological data were evaluated, as described below, to determine if water quality met the water quality criteria established to protect the State classified uses defined in S.C. Regulation 61-68, *Water Classifications and Standards*. Some waters may exhibit characteristics outside the appropriate criteria due to natural conditions. Such natural conditions do not constitute a violation of the water quality criteria. To determine the appropriate classified uses and water quality criteria for specific waterbodies and locations, refer to S.C. Regulation 61-69, *Classified Waters*, in conjunction with S.C. Regulation 61-68.

At the majority of SCDHEC's surface water monitoring stations, samples for analysis are collected as surface grabs once per month, quarter, or year, depending on the parameter. Grab samples collected at a depth of 0.3 meters are considered to be a surface measurement. For the purpose of assessment, only surface samples are used in standards comparisons and trend assessments. Because of the inability to target individual high or low flow events on a statewide basis these data are considered to represent typical physical conditions and chemical concentrations in the waterbodies sampled. All water and sediment samples are collected and analyzed according to standard procedures (SCDHEC 1997, 2001).

Results from water quality samples can be compared to State and USEPA criteria, with some restrictions due to time of collection and sampling frequency. For certain parameters, the monthly sampling frequency employed in the ambient monitoring network is insufficient for strict interpretation of the standards. The USEPA does not define the sampling method or frequency other than indicating that it should be "representative." The grab sample method is considered to be representative for the purpose of indicating excursions relative to criteria, within certain considerations. A single grab sample is more representative of a one-hour average than a four-day average, more representative of a one-day average than a one-month average, and so on; thus, when inferences are drawn from grab samples relative to criteria, sampling frequency and the intent of the criteria must be weighed. When the sampling method or frequency does not agree with the intent of the particular criterion, any conclusion about water quality should be considered as only an indication of conditions, not as a proven circumstance.

Macroinvertebrate community structure is analyzed routinely, at selected stations, as a means of detecting adverse biological impacts on the aquatic fauna of the state's waters due to water quality conditions that may not be readily detectable in the water column chemistry.

This water quality assessment is based on the last complete five years of available quality assured physical, chemical, and biological data ***(2002-2006).***

AQUATIC LIFE USE SUPPORT

One important goal of the Clean Water Act, the South Carolina Pollution Control Act, and the State Water Quality Classifications and Standards is to maintain the quality of surface waters to provide for the survival and propagation of a balanced indigenous aquatic community of fauna and flora. The degree to which aquatic life is protected (Aquatic Life Use Support) is assessed by comparing important water quality characteristics and the concentrations of potentially toxic pollutants with numeric criteria.

Support of aquatic life uses is determined based on the percentage of numeric criteria excursions and, where data are available, the composition and functional integrity of the biological community. The term excursion is used to describe a measured pollutant concentration that is outside of the acceptable range as defined by the appropriate criterion. Some waters may exhibit characteristics outside the appropriate criteria due to natural conditions. Such natural conditions do not constitute a violation of the water quality criteria. A number of waterbodies have been given waterbody-specific criteria for pH and dissolved oxygen, which reflect natural conditions. To determine the appropriate numeric criteria and classified uses for specific waterbodies and locations, please refer to S.C. Regulation 61-68, *Water Classifications and Standards* and S.C. Regulation 61-69, *Classified Waters*.

If the appropriate criterion for **dissolved oxygen and pH** are contravened in 10 percent or less of the samples, the criterion is said to be fully supported. If the percentage of criterion excursions is greater than 10 percent, but less than or equal to 25 percent, the criterion is partially supported, unless excursions are due to natural conditions. If there are more than 25 percent

excursions, the criterion is not supported, unless excursions are due to natural conditions. The decision that criteria excursions are due to natural conditions is determined by consensus and/or the professional judgment of SCDHEC staff with specific local knowledge.

If the appropriate acute or chronic aquatic life criterion for any individual **toxicant** (**heavy metals, priority pollutants, ammonia**) is exceeded more than once, representing more than 10 percent of the samples collected, the criterion is not supported. If the acute or chronic aquatic life criterion is exceeded more than once, but in less than or equal to 10 percent of the samples, the criterion is partially supported.

The total recoverable metals criteria for **heavy metals** are adjusted to account for solids partitioning following the approach set forth in the Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993, by Martha G. Prothro, Acting Assistant Administrator for Water, available from the Water Resource center, USEPA, 401 M St., SW, mail code RC4100, Washington, DC 20460; and 40CFR131.36(b)(1). Under this approach, a default TSS value of 1 mg/L is used. Where the metals criteria are hardness based, a default value of 25 mg/L is used for waters where hardness is 25 mg/l or less.

The calculation of the appropriate criterion value for **ammonia** requires the values of several associated field parameters measured concurrent with the ammonia sample collection. Where direct measurements of any of the parameters are lacking the ammonia value will not be used to determine compliance with the standards.

If the appropriate criterion for **turbidity** in all waters, and for waters with **numeric total phosphorus, total nitrogen, and chlorophyll-a** criteria is exceeded in more than 25 percent of the samples, the criterion is not supported. If the criterion is exceeded in more than 10 but less than 25 percent, sites are evaluated on a case-by-case basis to determine if local conditions indicate that classified uses are impaired. Among the characteristics considered are: hydrology and morphometry of the waterbody, existing and projected trophic state, characteristics of pollutant loadings and ongoing pollutant control mechanisms. If the criterion is exceeded in less than 10 percent of the samples, then the criterion is fully supported.

If the conclusion for any single parameter is that the criterion is “not supported”, then it is concluded that aquatic life uses are not supported for that waterbody, at that monitoring location. If there are no criteria that are “not supported”, but the conclusion for at least one parameter criterion is “partially supported”, then the conclusion is aquatic life uses are partially supported. Regardless of the number of samples, no monitoring site will be listed as partially or not supporting for any pollutant based on a single sample result because of the possibility of an anomalous event.

The goal of the standards for aquatic life uses is the protection of a balanced indigenous aquatic community; therefore, biological data is the ultimate deciding factor, regardless of chemical conditions. If biological data shows a healthy, balanced community, the use is considered supported even if chemical parameters do not meet the applicable criteria.

MACROINVERTEBRATE DATA INTERPRETATION

Macroinvertebrate community assessment data are used to directly determine Aquatic Life Use Support and to support determinations based on water chemistry data. Macroinvertebrate community data may also be used to evaluate potential impacts from the presence of sediment contaminants. Aquatic and semi-aquatic macroinvertebrates are identified to the lowest practical taxonomic level depending on the condition and maturity of specimens collected. The EPT Index and the North Carolina Biotic Index are the main indices used in analyzing macroinvertebrate data. To a lesser extent, taxa richness and total abundance may be used to help interpret data.

The EPT Index or the Ephemeroptera (mayflies) - Plecoptera (stoneflies) - Trichoptera (caddisflies) Index is the total taxa richness of these three generally pollution-sensitive orders. EPT values are compared with least impacted regional sites. The Biotic Index for a sample is the average pollution tolerance of all organisms collected, based on assigned taxonomic tolerance values. A database is currently being developed to establish significant EPT index levels to be used in conjunction with the Biotic Index to address aquatic life use support.

Taxa richness is the number of distinct taxa collected and is the simplest measure of diversity. High taxa richness is generally associated with high water quality. Increasing levels of pollution progressively eliminate the more sensitive taxa, resulting in lower taxa richness. Total abundance is the enumeration of all macroinvertebrates collected at a sampling location. When gross differences in abundance occur between stations, this metric may be considered as a potential indicator.

RECREATIONAL USE SUPPORT

Recreational use support is defined as the degree to which the swimmable goal of the Clean Water Act is attained and is based on the frequency of fecal coliform bacteria excursions. A fecal coliform excursion is defined as an occurrence of a bacteria concentration greater than 400/100 ml for all surface water classes. Comparisons to the bacteria geometric mean standard are not considered appropriate based on sampling frequency and the intent of the standard. If 10 percent or less of the samples are greater than 400/100 ml, then recreational uses are said to be fully supported. If the percentage of standards excursions is greater than 10 percent, but less than or equal to 25 percent, then recreational uses are said to be partially supported. If the percentage of excursions is greater than 25 percent, then it is considered to represent nonsupport of recreational uses.

FISH CONSUMPTION USE SUPPORT

SCDHEC uses a risk-based approach to evaluate fish tissue data and to issue consumption advisories in affected waterbodies. This approach contrasts the average daily exposure dose to the reference dose (RfD). Using these relationships, fish tissue data are interpreted by determining the consumption rates that would not be likely to pose a health threat to adult males and nonpregnant adult females. Because an acceptable RfD for developmental neurotoxicity has not been developed,

pregnant women, infants, and children are advised to avoid consumption of fish from any waterbody where a mercury advisory was issued.

Fish consumption use support is determined by the occurrence of advisories or bans on consumption for a waterbody. For the support of fish consumption uses, a fish consumption advisory indicates partial use support, a consumption ban indicates nonsupport of uses. Fish consumption advisories are updated annually in the spring. For background information and the most current advisories please visit the Bureau of Water homepage at http://www.scdhec.gov/water and click on "Advisories." For more information or a hard copy of the advisories, call SCDHEC's Fish Consumption Advisory toll-free hotline at (888) 849-7241.

DRINKING WATER USE SUPPORT

Nonattainment of drinking water use is indicated if the median concentration of the ambient surface water data for any pollutant exceeds the appropriate drinking water Maximum Contaminant Level (MCL), based on a minimum of three samples. Where MCLs do not exist, SCDHEC may use or develop other criteria such that pollutant concentrations or amounts do not interfere with drinking water use, actual or intended, as determined by SCDHEC.

Additional Screening and Prioritization Tools

Evaluation of water quality data and other supplemental information facilitates watershed planning. Information from the following sources is used to develop watershed-based protection and prevention strategies.

LONG-TERM TREND ASSESSMENT

As part of the watershed water quality assessments, surface data from each station are analyzed for statistically significant long-term trends using the Seasonal Kendall Test Without Correction (SKWOC) for significant serial correlation, using a program written in-house using SAS. Flows are not available for most stations, and the parametric concentrations are not flow-corrected. Seasonal Kendall's Tau Analysis is used to test for the presence of a statistically significant trend of a parameter, either increasing or decreasing, over a fifteen-year period. It indicates whether the concentration of a given parameter is exhibiting consistent change in one direction over the specified time period. A two sided test at $p=0.1$ is used to determine statistically significant trends, and the direction of trend. An estimate of the magnitude of any statistically significant trend is calculated.

A rigorous evaluation for trends in time-series data usually includes a test for autocorrelation. The data are not tested for autocorrelation prior to the trend analysis. It is felt that autocorrelation would not seriously compromise a general characterization of water quality trends based on such a long series of deseasonalized monthly samples.

One of the advantages of the seasonal Kendall test is that values reported as being below detection limits (DL) are valid data points in this nonparametric procedure, since they are all

considered to be tied at the DL value. When the DL changed during the period of interest, all values are considered to be tied at the highest DL occurring during that period. Since it is possible to measure concentrations equal to the value of the DL, values less than DL are reduced by subtraction of a constant so that they remain tied with each other, but are less than the values equal to the DL. Since fecal coliform bacteria detection limits vary with sample dilution, there is no set DL; therefore, for values reported as less than some number, the value of the number is used.

For the purposes of this assessment, long-term trends in selected parameters were examined using data collected from 1992 through 2006.

Groundwater Quality

The state of South Carolina depends upon its groundwater resources to supply an estimated 40 percent of its residents. To monitor the ambient quality of this valuable resource, a network of existing public and private water supply wells has been established that provides groundwater quality data representing all of the State's major aquifers (see SCDHEC's Ambient Groundwater Quality Monitoring Network Report for listing of groundwater quality data). A great deal of monitoring is also being carried out at regulated sites with known or potential groundwater contamination (see SCDHEC's South Carolina Groundwater Contamination Inventory).

The ambient monitoring network has been designed to avoid wells in areas of known or potential contamination in order to analyze natural aquifer conditions. Information collected can then be used to identify variations in water chemistry among the major aquifers of South Carolina and give a general understanding of the groundwater conditions throughout the state at varying depths.

Wells sampled in the Saluda River Basin were drilled into one of two aquifers. All the wells above the Fall Line are completed in the Piedmont Bedrock Aquifer while wells below the Fall Line are completed in the Middendorf Aquifer. All well samples met state standards for Class GB groundwater (see section on Classified Waters, Standards, and Natural Conditions). The ambient monitoring well sites are indicated in the appropriate watershed evaluations and depicted on the watershed maps.

Piedmont Bedrock Aquifer

The Piedmont Bedrock Aquifer extends from the Fall Line to the Blue Ridge Mountains. The Piedmont bedrock consists of fractured crystalline rock overlain by a saprolitic regolith, and limited alluvial valley fill deposits. Most public and private wells are completed in the fractured crystalline bedrock. Yields from crystalline bedrock vary greatly among wells, depending primarily upon the existence of joints and fractures within the rock. If fractures do exist, yield and specific capacity further depend upon the size of fractures and degree of fracture interconnection. The overlying saprolite is hydraulically connected with the underlying bedrock and provides the primary source of recharge water to the bedrock aquifer. Yields of 4 to 170 gallons per minute (gpm) from the 30 network wells in the Piedmont bedrock have been recorded. This broad range in yield is an indicator

of the great variability in the occurrence, size and interconnection of joints and other fractures that exist in this aquifer.

The primary cation and anion measured in water from the Piedmont bedrock aquifer is calcium and bicarbonate, respectively, although all of the major ions (sodium, potassium, calcium, magnesium, chlorine, bicarbonate, and sulfate) are present at detectable concentrations in most samples.

Saprolite Aquifer

Although the majority of South Carolina's Piedmont groundwater supplies come from the bedrock aquifer, the overlying regolith composed primarily of saprolitic soils is also a significant water producing unit. Saprolite is an in-place weathering product of the crystalline rock, which can be absent at some locations and over 150 feet thick in others. Because the saprolite has not been transported, many of the original structures of the parent bedrock (fractures, dikes, faults, foliations, etc.) are preserved and act to influence groundwater flow. Although there are many localized exceptions, saprolite in the South Carolina Piedmont is dominated by silt-sized particles, with varying amounts of sand and clay, depending upon the parent rocks original texture and mineralogy.

Because of its typically low hydraulic conductivity, saprolite generally provides low yielding wells and is normally suitable only for low-volume, domestic water demands. Saprolite aquifer wells are commonly installed with large-diameter (24 inch) boring equipment, and are more prone to contamination from bacteria and near-surface sources because of their characteristically shallow depth and construction methods (which often do not create an adequate surface seal). Nine saprolite wells have been included in the monitoring network. As described in the previous section, saprolite aquifer water chemistry is similar to water in the underlying bedrock aquifer, with calcium and bicarbonate being the dominant ions.

Middendorf Aquifer

The Middendorf Aquifer directly overlies the Bedrock Aquifer and stretches from the Fall Line, where it outcrops, to the Atlantic coast, where it exceeds depths of 3000 feet. The Middendorf Aquifer is the main provider of groundwater to numerous private and public wells in the lower portion of the Saluda River Basin. It is generally composed of fairly coarse sands and therefore is capable of yielding considerable amounts of water. The sands that make up the Middendorf Aquifer are typically clean, containing relatively few heavy minerals or organics. The aquifer, especially in the exposed recharge areas, is highly leached of soluble minerals and recharge water approaches the chemistry of distilled water. Water tends to be soft, acidic, and low in dissolved solids, with locally high iron content. This tendency changes toward the coast due to minute amounts of minerals that slowly dissolve in the water as it flows and ages. As it reaches the coastal areas, the concentration is high enough to affect the water quality; however, the Middendorf Aquifer now lies beneath waters of similar quality and more easily reached aquifers.

NPDES Program

The Water Facilities Permitting Division is responsible for drafting and issuing National Pollutant Discharge Elimination System (NPDES) permits. Facilities are defined as either "major" or "minor." For municipal permits, a facility is considered a "major" if it has a permitted flow of 1 MGD (million gallons per day) or more and is not a private facility. The determination for industrial facilities is based on facility and stream characteristics, including toxicity, amount of flow, BOD (biochemical oxygen demand) loading, proximity of drinking water source, potential to exceed stream standards, and potential effect on coastal waters.

Permitting Process

A completed draft permit is sent to the permittee, the SCDHEC District office, and if it is a major permit, to the USEPA for review. A public notice is issued when the permit draft is finalized. Comments from the public are considered and, if justified, a public hearing is arranged. Both oral and written comments are collected at the hearing, and after considering all information, SCDHEC staff makes the decision whether to issue the permit as drafted, issue a modified permit, or to deny the permit. Everyone who participated in the process receives a notice of the final decision. A copy of the final permit will be sent to anyone who requests it. Staff decisions may be appealed according to the procedures in R.61-72 and the rule of the Administrative Law Court of South Carolina.

The permitting Divisions use general permits with statewide coverage for certain categories of discharges. Discharges covered under general permits include utility water, potable surface water treatment plants, potable groundwater treatment plants with iron removal, petroleum contaminated groundwater, mine dewatering activities, aquaculture facilities, bulk oil and gas terminals, hydrostatic test waters (oil & gas lines), and vehicle wash waters. State land application systems for land disposal and lagoons are also permitted.

Wasteload Allocation

A wasteload allocation (WLA) is the portion of a stream's assimilative capacity for a particular pollutant that is allocated to an existing or proposed point source discharge. Existing WLAs are updated during the basin review process and included in permits during the normal permit expiration and reissuance process. New WLAs are developed for proposed projects seeking a discharge permit or for existing discharges proposing to increase their effluent loading at the time of application. Wasteload allocations for oxygen demanding parameters and nutrients are developed by SCDHEC's modeling staff, and WLAs for toxic pollutants and metals are developed by the appropriate permitting division.

The ability of a stream to assimilate a particular pollutant is directly related to its physical and chemical characteristics. Various techniques are used to estimate this capacity. Simple mass balance/dilution calculations may be used for a particular conservative (nondecaying) pollutant while complex models may be used to determine the fate of nonconservative pollutants that degrade

in the environment. Waste characteristics, available dilution, and the number of discharges in an area may, along with existing water quality, dictate the use of a simple or complex method of analysis. Projects that generally do not require complex modeling include: groundwater remediation, noncontact cooling water, mine dewatering, air washers, and filter backwash. Streams that have been modeled are indicated on the watershed maps.

Streams are considered either effluent limited or water quality limited based on the level of treatment required of the dischargers to that particular portion of the stream. In cases where the USEPA published effluent guidelines and the minimum treatment levels required by law are sufficient to maintain instream water quality standards, the stream is said to be effluent limited. Streams lacking the assimilative capacity for a discharge at minimum treatment levels are said to be water quality limited. In cases where better than technology limits are required, water quality, not minimum treatment requirements, controls the permit limits. SCDHEC's modeling staff develops limits for numerous parameters including ammonia nitrogen (NH3-N), dissolved oxygen (DO), and five-day biochemical oxygen demand (BOD_5). Limits for other parameters, including metals, toxics (including total residual chlorine), and nutrients are developed by the Water Facilities Permitting Division in conjunction with support groups within SCDHEC.

Nonpoint Source Management Program

Nonpoint source (NPS) water pollution, sometimes called "runoff pollution" or "polluted runoff" does not result from a discharge at a specific, single location (or point), but generally comes from diffuse, numerous sources. Runoff occurring after a rain event may transport sediment from plowed fields, construction sites, or logging operations, pesticides and fertilizers from farms and lawns, motor oil and grease deposited on roads and parking lots, or bacteria containing waste from agricultural animal facilities or malfunctioning septic systems. The rain moves the pollutants across the land to the nearest waterbody or storm drain where they may impact the water quality in creeks, rivers, lakes, estuaries, and wetlands. NPS pollution may also impact groundwater when it is allowed to seep or percolate into aquifers. Adverse effects of NPS pollution include physical destruction of aquatic habitat, fish kills, interference with or elimination of recreational uses of a waterbody (particularly lakes), closure of shellfish beds, reduced water supply or taste and odor problems in drinking water, and increased potential for flooding because waterbodies become choked with sediment.

Congress recognized the growing problem of nonpoint source pollution in the late 1980s, and added NPS provisions to the federal law. Section 319 of the 1987 Amendments to the Clean Water Act required states to assess the nonpoint source water pollution associated with surface and groundwater within their borders and then develop and implement a management strategy to control and abate the pollution. The first Assessment of Nonpoint Source Pollution in South Carolina accomplished this purpose. SCDHEC's Bureau of Water manages the ongoing State NPS Management Program, which develops strategies and targets waterbodies for priority

implementation of management projects. Section 319 funds various voluntary efforts, including watershed-based improvement projects, which address many aspects of the pollution prevention management measure and provide education, outreach and technical assistance to various groups and agencies. Most of the projects are implemented by cooperating agencies.

Many land activities can individually or cumulatively contribute to NPS pollution. Eight categories of NPS pollution sources have been identified as contributing to water quality degradation in South Carolina: agriculture, forestry, urban areas, marinas and recreational boating, mining, hydrologic modification, wetlands and riparian areas disturbance, land disposal, and groundwater contamination. There are programs in place, both regulatory and voluntary to address all eight categories.

Agriculture

In South Carolina, pesticides, fertilizers, animal waste, and sediment are potential sources of agricultural NPS pollution. Agricultural activities also have the potential to directly impact the habitat of aquatic species through physical disturbances caused by livestock or equipment, and through the management of water. The State has laws and regulations that prevent NPS pollution from several agricultural sources including pesticides and animal waste. Funding programs, including those under §319 grants from EPA such as the Environmental Quality Incentives Program (EQIP) and the Conservation Reserve Program (CRP), cost share funds from USDA and are used to implement best management practices that are not covered under regulations. Agriculture land acreage is quantified in the basin-wide and individual watershed evaluations.

Silviculture

Forests comprise a major portion of South Carolina's land base. As of 2009, 67% (12.9 million acres) of the State's total land area is in timberland. Silvicultural practices associated with road access, harvest, and regeneration of timber present the most significant potential for NPS pollution. Silvicultural activities have the potential to degrade the State's waters through the addition of sediment, nutrients, organics, elevated temperature, and pesticides. Erosion and subsequent sedimentation are the most significant and widespread NPS problems associated with forestry practices. Sudden removal of large quantities of vegetation through harvesting or silvicultural practices can also increase leaching of nutrients from the soil system into surface waters and groundwaters. Most water quality impacts from forestry are temporary or short-lived, can be minimized or mitigated when Best Management Practices (BMPs) are applied, and the site recovers within 2-3 years as vegetation is re-established.

Overall compliance with South Carolina's Best Management Practices for Forestry is 98.6% for timber harvesting operations. Programs to abate or control NPS pollution from forestry activities are primarily the responsibility of the S.C. Forestry Commission (SCFC) and the United States Department of Agriculture's Forest Service (USFS), with other agencies having supplementary

programs. SCFC provides the results of courtesy exams of forestry operations monthly to both SCDHEC's Division of Water Quality and to forest industries. Impacts from silviculture can be significant if BMPs are not properly applied. If water quality was impacted by a forestry operation, SCDHEC may institute enforcement action under the South Carolina Pollution Control Act. The United States Department of Agriculture's Natural Resources Conservation Service (USDA-NRCS) also provides technical assistance to government, landowners, and land users. Forest land acreage is quantified in the basin-wide and individual watershed evaluations.

Urban Areas

Urbanization has been linked to the degradation of urban waterways. The major pollutants found in runoff from urban areas include sediment, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, pathogenic bacteria, and viruses. Suspended sediments constitute the largest mass of pollutant loadings to receiving waters from urban areas. Construction sites are a major source of sediment erosion. Nutrient and bacterial sources of contamination include fertilizer and pesticide usage, pet wastes, leaves, grass clippings, and faulty septic tanks. Petroleum hydrocarbons result mostly from automobile sources. From April 2000 through July 2008, statewide population growth was 11.7 percent, while the coastal counties had an increase of 19.7 percent, during the same time period. This continuing development and population growth has the potential to make urban runoff the most significant source of pollution in waters of the State in the future, particularly in South Carolina's coastal communities. Urban land acreage is quantified in the basin-wide and individual watershed evaluations.

SCDHEC has a number of statewide programs that address components of urban NPS pollution. The Bureau of Water administers four permitting programs that control runoff from new and existing urban sources. These include the Stormwater and Sediment Reduction program, Municipal Separate Storm Sewer System (MS4), Industrial NPDES Stormwater Permits, and the §401 water quality certification program (see p.27). Additional controls for urban runoff in the coastal zone are implemented by SCDHEC's Oceans and Coastal Resources Management (OCRM) through the State Coastal Zone Management Plan.

SCDHEC's Bureau of Environmental Health's Division of Onsite Wastewater Management administers the Onsite Sewage Disposal System program for the entire State, and oversees the permitting for the installation and management of septic systems. Although not associated with urban land use, this Division permits the septic systems of camping facilities if the facility is not on public sewer. The camp sewage is discharged into a public collection, treatment and disposal system if available, or an onsite wastewater treatment and disposal system (septic tank) is used.

Marinas and Recreational Boating

As with any human activity, marinas and associated recreational boating activities have the potential to impact the natural environment. Marine sanitation devices and illicit discharges can be sources of bacteria and oxygen demanding substances. Antifouling paints, exhausts, and maintenance activities can be sources of toxic metals, hydrocarbons, and other pollutants. Construction and maintenance activities, such as dredging, can negatively impact aquatic habitats and ecosystems. The physical characteristics of marinas (basin verses open water, high tidal flushing verses low or no tidal flushing, etc.) have the potential to impact water quality. To ensure that impacts associated with existing and proposed marinas are minimized to the greatest extent possible, the U.S. Army Corps of Engineers and the SCDHEC are responsible for permitting marinas in South Carolina. Within SCDHEC, the two offices that have marina permitting authority are the Office of Ocean and Coastal Resource Management (SCDHEC OCRM) and the Office of Environmental Quality Control (SCDHEC Bureau of Water). SCDHEC OCRM issues critical area permits for marinas within the critical area of the coastal zone. SCDHEC Bureau of Water issues permits for marinas at all other locations within the State and issues §401 Water Quality Certifications (see p.27) for marinas statewide. The U.S. Coast Guard and the S.C. Department of Natural Resources are responsible for managing recreational boating activity.

Mining

South Carolina's mineral production consists of non-fuel minerals that provide raw materials for construction products and a precious metal industry. Portland cement clays (kaolin and brick), sand and gravel, and crushed stone represent the majority of the total mineral value. As of June 30, 2009 there were 615 permitted mining operations in South Carolina totaling 76,546 acres (includes acreage for excavation, buffer, and mine reserves). There were 335.8 acres of mine land reclaimed during the past fiscal year, which brings the cumulative total of mine land reclaimed since the beginning of the mining and reclamation program to 17,271 acres. Surface mining has the potential to generate NPS pollution during mineral exploration, mine development extraction, transportation, mining and processing, product storage, waste disposal, or reclamation. Potential nonpoint source impacts related to mining activities generally include hydrologic modification, erosion and sedimentation, water quality deterioration, fish and wildlife disturbances, and public nuisances.

SCDHEC's Bureau of Land and Waste Management has primary regulatory responsibility for mining activities. Within the Bureau, the Division of Mining and Solid Waste Permitting is responsible for administering and implementing the S.C. Mining Act and its associated regulations. The Mining Act serves as part of an overall management plan for NPS pollution from active mines. Mining activities and locations are identified in the appropriate watershed evaluations.

Hydromodification

Hydrologic modification (or hydromodification) is defined as stream channelization, channel modification, and dam construction. These activities can negatively impact water quality, destroy or modify in-stream habitat and increase streambank and shoreline erosion. Two State permits, implemented by the SCDHEC, are involved in the implementation of management measures for hydromodification. A critical area permit is required for coastal waters, saltwater wetlands, and beaches defined as critical areas. A navigable waters permit is required for the remainder of the State. Implementation of State policy for dam construction is similar to control of other hydromodification projects in South Carolina, requiring the same State permits and certifications. In addition, dams require a State dam safety permit or a State stormwater management and sediment reduction permit. SCDHEC must also issue Water Quality Certifications pursuant to §401 of the Federal Clean Water Act for dam construction and hydropower operations licensed by the Federal Energy Regulatory Commission.

Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. According to the most recent survey by the U.S. Fish and Wildlife Service (Dahl 1999), twenty-one percent of South Carolina is covered by 4,104,805 acres of wetlands. The U.S. Army Corps of Engineers implements the federal program for regulating development in wetlands with guidelines established by EPA. The Corps delineates wetlands and determines which wetlands fall under regulatory jurisdiction and require a federal permit for development. At the state level, the primary focus of wetland regulation is through the §401 Water Quality Certification. In accordance with §401 of the Federal Clean Water Act, a certification is required by the state for any Federal permit that may result in a discharge to waters of the state, including wetlands. Applications for wetland alterations may be denied or modified due to the special nature of a wetland or the functions that a wetland provides. Wetland impacts must be compensated for through restoration, enhancement, preservation, or creation and protected in perpetuity. Future development would be legally protected in these areas. Knowledge of areas that are restricted from development due to mitigation or special water classification is useful in planning future development in a watershed. Wetland acreage is quantified in the basin-wide and individual watershed evaluations.

Land Disposal

Solid Waste Landfills are permitted by the Bureau of Land and Waste Management under Regulation 61-107.19. There are three classifications of Solid Waste Landfills in South Carolina: Class One Landfills, Class Two Landfills, and Class Three Landfills. The landfill classifications are based upon the physical and chemical characteristics of the waste that is disposed in each landfill. There are currently 171 permitted landfills in South Carolina. This total represents 56 Class One

Landfills that are limited to disposal of land-clearing debris; 91 Class Two Landfills that receive construction and demolition debris and waste streams that characterize at less than ten times the maximum contamination limits for drinking water; and 24 Class Three Landfill that receive municipal solid wastes and other nonhazardous waste streams that must be characterized prior to acceptance. Solid Waste Landfills are considered point sources of pollution and are thereby required to have BOW industrial storm water permits. Storm water runoff from these landfills may have an impact on the watershed if it is not managed correctly. Regulatory authority over solid waste disposal activities resides with SCDHEC's Bureau of Land and Waste Management. All active and closed Solid Waste Landfills are identified in the appropriate watershed evaluations.

Land application of wastewater or its by-products is a form of recycling because it allows recovery of elements needed for crop production. Land application of biosolids may be beneficial and environmentally sound when applied at the correct agronomic rate. Land applying biosolids can benefit farmers by offsetting the costs of fertilizer and lime while reducing the pressure on existing landfills. SCDHEC's Bureau of Water, Division of Water Monitoring, Assessment and Protection, Groundwater Management Section conducts a program to prevent and monitor groundwater contamination from nonpoint source pollution from land application of wastewater biosolids, solids, animal manures, biosolids, and sewage sludge. Land application, which is not a discharge, requires a "no discharge" permit (ND). All active industrial and municipal land applications are identified in the appropriate watershed evaluations.

Groundwater Contamination

All aquifers in the State are potential Underground Sources of Drinking Water and are protected under the S.C. Water Classifications and Standards. Groundwaters are thus protected in a manner consistent with the SCDHEC groundwater protection strategy. Staff hydrogeologists implement a screening program for nonpoint source impacts from pits, ponds, and lagoons associated with the permitted storage, treatment, and disposal of industrial and municipal wastewaters. In cases where a groundwater impact has been identified in violation of S.C. Water Classifications and Standards, appropriate actions will be coordinated with the facility owner to ensure regulatory compliance. The hydrogeologist coordinates with the facility owner to implement source identification, contaminant extent assessments, initiation of contaminant remediation systems, and performance evaluations of corrective actions. In addition to releases from wastewater treatment systems, the staff evaluates releases from other nonpoint sources such as above ground tanks, nonregulated fuel oil tanks, spills and/or leaks. Sites with confirmed groundwater impact will be placed under a Consent Agreement or an Order. SCDHEC's South Carolina Groundwater Contamination Inventory quantifies the status of groundwater quality in South Carolina. The sites in the inventory are known groundwater contamination cases in the State, and are referenced by name and county, and updated annually.

Water Quantity

Any withdrawal of surface water or groundwater over 3 million gallons in any month is required to be reported to SCDHEC (per the *Surface Water Withdrawal and Reporting Act* 49-4-10 and the *Groundwater Use and Reporting Act* 49-5-10). These data are compiled into an annual report of total water usage in the state (see SCDHEC's South Carolina Water Use Report). The report also breaks down water usage into categories of interest such as water supply, hydropower, agriculture, and irrigation. In Capacity Use Areas, which are of concern due to the significant groundwater use and subsequent lowering of groundwater levels in major aquifers, withdrawals over 3 million gallons in any month must receive a permit from SCDHEC. Currently, no quantity permit is required for surface water withdrawals.

Interbasin Transfer of Water

According to the State Interbasin Transfer of Water Act, an interbasin transfer (IBT) of water permit is required when any entity desires to withdraw, divert, pump, or cause directly the transfer of either 5% of the 7Q10 (seven day, ten year low flow), or one million gallons or more of water a day on any day, whichever is less, from one river basin and use or discharge all or any part of the water in a different river basin. The SCDHEC Board is empowered to negotiate agreements, accords, or compacts on behalf of and in the name of the State of South Carolina with other states or the United States, or both, with any agency, department, or commission of either, or both, relating to transfers of water that impact waters of this State, or are connected to or flowing into those waters. The Board is further empowered to represent this State in connection with water withdrawals, diversions, or transfers occurring in other states, which may affect this State.

In June 2010, Senate Bill 452 or the Surface Water Withdrawal and Reporting Act was signed into law and it will supercede the State Interbasin Transfer of Water Act after January 1, 2011. It covers all surface water withdrawals that are 3 million gallons per month. Any existing surface water withdrawals will be grandfathered in for the amount of water they can remove at the date the law goes into effect. IBT's are included as existing surface water withdrawers, and are grandfathered in for the amount listed in their IBT permits. Any applications that are administratively complete as of January 1, 2011 will be considered existing users and be grandfathered in for the amount their intakes are designed to pump.

Growth Potential and Planning

Land use and management can define the impacts to water quality in relation to point and nonpoint sources. Assessing the potential for an area to expand and grow allows for water quality planning to occur and, if appropriate, increased monitoring for potential impairment of water quality. Indicators used to predict growth potential include water and sewer service, road and highway accessibility, and population trends. These indicators and others were used as tools to determine areas having the greatest potential for impacts to water quality as a result of development.

Watershed boundaries extend along topographic ridges and drain surrounding surface waters. Roads are commonly built along ridge tops with the best drainage conditions. Cities often develop in proximity to ridges as a result of their plateau terrain. It is not uncommon, then, to find cities or road corridors located along watershed boundaries, and thus influencing or impacting several watersheds.

SCDHEC's Strategic Plan for 2005-2010 (www.scdhec.gov/news/releases/pdf files/Stratpln.pdf) acknowledges that growth issues are best handled at the local government level. SCDHEC's role is to work with local governments and communities to help them understand the importance of planning for smart growth: buffers, greenspaces, mass transit, subdivision and roadway planning, bike paths and bike lanes, and park and ride lots. SCDHEC can also provide assistance in helping local entities access information and provide consultation on technical issues such as the establishment of buffers and watershed stormwater planning. Many counties in the Savannah River Basin lack county wide zoning ordinances; therefore, there is little local regulatory power to influence the direction or magnitude of regional growth. The majority of municipalities have zoning ordinances in place; however, much of the growth takes place just outside the municipal boundaries, where infrastructure is inadequate. Section 208 of the Clean Water Act serves to encourage and facilitate the development and implementation of areawide waste treatment management plans. South Carolina's water quality management plans support consolidation of wastewater treatment facilities into larger regional systems.

The regional Councils of Government (COGs) located in the Saluda River Basin include the Appalachian COG, the Upper Savannah COG, the Lower Savannah COG, and the Central Midlands COG. Growth potential reported in the individual watershed evaluations are updated by the COGs active in that watershed.

Watershed Protection and Restoration Strategies

SCDHEC's Bureau of Water is responsible for ensuring that South Carolina's water is safe for drinking and recreation, and suitable to support aquatic life. This section provides an overview of other important Bureau programs and strategies applied statewide to protect and restore water quality. The point and nonpoint source controls described previously assist with achieving these goals.

Under §303(d) of the Federal Clean Water Act, each state is required to provide a comprehensive inventory of impaired waters for which existing required pollution controls are not stringent enough to achieve State water quality standards or Federal Clean Water Act goals. This biennial list, commonly referred to as the "303(d) list", is the basis for targeting waterbodies for watershed-based solutions. A copy of the current §303(d) list can be obtained by contacting the Bureau of Water (803-898-4300) or online at www.scdhec.gov/water. Several Bureau programs address these impaired streams in an effort to restore them.

Total Maximum Daily Load

A Total Maximum Daily Load (TMDL) is the calculated maximum allowable pollutant loading to a waterbody at which water quality standards are maintained. A TMDL is made up of two main components, a load allocation and a wasteload allocation. A load allocation is the portion of the receiving water's loading capacity attributed to existing or future nonpoint sources or to natural background sources. The waste load allocation is the portion of a receiving water's loading capacity allocated to an existing or future point source.

A TMDL is a means for recommending controls needed to meet water quality standards in a particular water or watershed. Historically, the typical TMDL has been developed as a wasteload allocation, considering a particular waterbody segment, for a particular point source, to support setting effluent limitations. In order to address the combined cumulative impacts of all sources, broad watershed-based TMDLs are now being developed.

The TMDL process is linked to all other State water quality activities. Water quality impairments are identified through monitoring and assessment. Watershed-based investigations result in source identification and TMDL development. TMDLs form links between water quality standards and point and nonpoint source controls. Where TMDLs are established, they constitute the basis for NPDES permits and for strategies to reduce nonpoint source pollution. The effectiveness and adequacy of applied controls are evaluated through continued monitoring and assessment.

Funding for TMDL implementation is currently available with USEPA's §319 of the Clean Water Act grants. For more information, see the Bureau of Water web page www.scdhec.gov/water or call the TMDL Program at (803) 898-4300.

Antidegradation Implementation

The State's Antidegradation Policy as part of S.C. Regulation 61-68 is represented by a three-tiered approach to maintaining and protecting various levels of water quality and uses; streams included on the §303(d) list are addressed under Tier 1. Tier 1 antidegradation policies apply to all waters of the State and require that existing uses and the minimum level of water quality for those uses be maintained and protected. Tier 2 policies apply to high quality water where the water quality exceeds the mandatory minimum levels to support the Clean Water Act's goals of propagation of fish, shellfish, wildlife, and recreation in and on the water. SCDHEC considers all the waters of the State as high quality waters. Tier 3 policies apply to the maintenance of water quality in waters that constitute an Outstanding National Resource Water and do not allow for any permanent permitted dischargers. Outstanding Resource Waters of the State are provided a higher level of protection than Tier 2, but do not meet the requirements of Tier 3.

Tier 1 protection will be implemented when applying numeric standards included in Regulation 61-68 for human health, aquatic life, and organoleptic protection as follows: if a waterbody has been affected by a parameter of concern causing it to be on the §303(d) list, then SCDHEC will not allow a permitted net increase of loading for the parameter of concern unless the concentration will not contribute to a violation of water quality standards. This no net increase will be achieved by reallocation of existing total load(s) or by meeting applicable water quality standard(s) at the end-of-pipe. No discharge will be allowed to cause or contribute to further degradation of a §303(d) listed waterbody.

The Antidegradation Rules apply to both nonpoint source pollution and for point sources into impaired waters. Many activities contributing to nonpoint source pollution are controlled with voluntary measures. SCDHEC implements permitting or certification programs for some of these activities and has the opportunity to ensure compliance with the Antidegradation Rules. The activities of primary concern are land development projects which are immediately adjacent to and discharge runoff or stormwater into impaired waters.

§401 Water Quality Certification Program

If a Federal permit for a discharge into waters of the State, including wetlands, is required, SCDHEC must issue a Water Quality Certification pursuant to §401 of the Federal Clean Water Act. Certification is required for permits issued by the U.S. Army Corps of Engineers for construction in navigable waters and for deposition of dredged or fill material.

Regulation 61-101 Water Quality Certification requires SCDHEC to consider whether or not a project is water dependent; whether or not there are feasible alternatives which will have less adverse consequences on water quality and classified uses; the intended purpose of the project; and all potential water quality impacts of the project, both direct and indirect, over the life of the project. Any project with the potential to affect waters of the State must be conducted in such a manner as to maintain the specified standards and classified and existing water uses.

As a routine part of the §401 Water Quality Certification review process, the waterbody in question is identified as impaired or not impaired according to the §303(d) list. If it is impaired, the parameter of concern is noted, along with any steps required to prevent further degradation of the water quality of that waterbody.

Stormwater Program

Stormwater discharges result from precipitation during rain events. Runoff washes pollutants associated with industrial activities (including construction activity), agricultural operations, and commercial and household sites directly into streams, or indirectly into drainage systems that eventually drain into streams. The SCDHEC Stormwater Permitting Program focuses on pollution prevention to reduce or eliminate stormwater pollution. SCDHEC has general permitting authority for stormwater discharges associated with industrial activity, including construction. General NPDES permits SCR000000 and SCR100000 for industrial and construction activities, respectively, require permittees to develop and implement stormwater pollution prevention plans that establish best management practices to effectively reduce or eliminate the discharge of pollutants via stormwater runoff. The Construction, Stormwater and Agricultural Division is responsible for issuing NPDES stormwater permits to prevent degradation of water quality as well as for issuing state sediment and erosion control permits for construction sites.

NPDES permits are issued under the authority of the federal Clean Water Act and the S.C. Pollution Control Act. The state sediment and erosion control permits are issued under the authority of two S.C. laws. The S.C. Stormwater Management and Sediment Reduction Act of 1991 addresses construction on land that is not state owned or managed. Currently, NPDES permits are required for: construction sites 1 acre and greater; construction sites in the coastal area that are within 1/2 mile of a receiving water body; and construction sites less than 1 acre on a case-by-case basis where water quality is a concern. Permits are required under the state sediment and erosion control for construction sites that are greater than 2 acres; however, there are exemptions under the law and regulation. The State Sediment and Erosion Program is somewhat duplicative of the NDPES Stormwater Program. The state program created by the 1991 Act can be delegated to local governments. SCDHEC's Office of Ocean and Coastal Resource Management (OCRM) oversees stormwater permitting in the coastal area. The Stormwater Permitting Section manages the program in the remainder of the state.

SCDHEC is assisted in implementing these regulations by many cities and counties that have been delegated to run a stormwater program under provisions of the 1991 Act and/or are owners of Municipal Separate Storm Sewer Systems (MS4) and required to run stormwater management programs under the NPDES program. MS4 will identify all impaired water bodies in a Stormwater Management Plan (SWMP). In addition, existing pollution discharge control methods will be identified and incorporated into the SWMP. Procedures, processes, and methods to control the discharge of pollutants from the MS4 into impaired waterbodies and publicly owned lakes

included on the §303(d) list will be described in the SWMP. The effectiveness of these controls will be assessed and necessary corrective measures, if any, shall be developed and implemented.

NPDES MS4 permits allow communities to design SWMP that are suited for controlling pollutants in their jurisdiction. There are three population-based categories of MS4: large (population of 250,000 or greater), medium (population of 100,000 or more but less than 250,000), and small (population less than 100,000). Large and medium MS4 have been regulated since the 1990s. Those small MS4 within the boundaries of an urbanized area are called Regulated Small MS4. MS4 NPDES Permits are required for all large, medium, and regulated small MS4. MS4 can extend over more than one 10-digit watershed or even 8-digit river basin as it follows municipal boundaries, so the same permit can be listed in multiple watersheds. The MS4 receiving stream listed in the individual watershed evaluations is the mainline stream of the 10-digit hydrologic unit. The initial receiving source of the MS4 may be a smaller tributary upstream.

South Carolina Animal Feeding Operations Strategy

Among the general categories of pollution sources, agriculture ranks as the number one cause of stream and lake impairment nationwide. Many diseases can potentially be contracted from drinking water or coming into contact with waters contaminated with animal wastes. SCDHEC uses S.C. Regulation 61-43: *Standards for the Permitting of Agricultural Animal Facilities* to address the permitting of animal feeding operations (AFOs). Implementing these regulations and their corresponding compliance efforts are a priority for SCDHEC in order to reduce public health and environmental impacts from AFOs. There are approximately 1,100 active AFOs in S.C. There are no federally defined concentrated animal feeding operations (CAFOs) in operation in South Carolina based on the EPA definition of a CAFO in the NPDES regulations. Using the Watershed Program cycle and the division of the State into five regions, AFOs will be monitored and inspected by region. The §303(d) list will be used to prioritize the inspections. After all the inspections have been made in a region, SCDHEC will move to the river basins in the next region in the watershed cycle. SCDHEC is continuing to work in cooperation and coordination with the U.S. Department of Agriculture, the Natural Resources Conservation Service, the S.C. Department of Agriculture, the S.C. Soil and Water Conservation Districts, and the Clemson Extension Service.

Sewer Overflow Strategy

Sanitary sewers are designed to collect municipal and industrial wastewater, with the allowance for some acceptable level of infiltration and inflow, and transport these flows to a treatment facility. When the sewer system is unable to carry these flows, the system becomes surcharged and an overflow may occur. Sewer overflows (SSOs) have existed since the introduction of separate sanitary sewers, and most overflows are caused by inadequate operation, maintenance, and management of the collection system.

SCDHEC encourages utilities to embrace the principals of EPA's capacity Management, Operations, and Maintenance (cMOM) program. Through this program utilities can ensure adequate funding and capacity as well as a proactive approach to operations and maintenance. Those that have implemented cMOM programs have been able to significantly reduce or eliminate overflows from their collection systems. Additionally, SCDHEC has adopted requirements for operation and maintenance of sewer systems in Regulation 61-9, Water Pollution Control Permits.

SCDHEC's approach has been to shift resources historically applied to treatment plant inspections to include evaluations of pump stations and collection systems where problems are suspected. To assist in identifying water quality violations related to SSOs, staff have utilized the 303(d) list of impaired waters to identify waters impacted by fecal coliform or other appropriate pollutants and correlate those with collection systems with incidences of SSOs. SCDHEC's Enforcement Referral Procedures Document is to be used to determine when a collection system should be referred to enforcement for SSOs. The enforcement process allows for SCDHEC to consider actions taken by the collection system such as: timely and proper notification, containment and mitigation of discharge, voluntarily conducting self evaluations, and requests for compliance assistance. SCDHEC will take immediate action where it has been determined that SSOs have occurred and the collection system has not made timely and proper notification.

SCDHEC's Watershed Stewardship Programs

Public participation is an important component of SCDHEC's Watershed Water Quality Management Program. Benefits to this interaction on the local level include improved public awareness about SCDHEC water programs, and increased local interest and participation in water quality improvement. Described below are some of SCDHEC's water programs that encourage public interest and involvement in water quality. These programs and their contacts are listed on SCDHEC's website at www.scdhec.gov/water.

Source Water Assessment Program

A safe, adequate source of drinking water is key to development of communities and the health of citizens. The Safe Drinking Water Act (SDWA) places an emphasis on protection of sources of drinking water. As a result of the 1996 amendments to the SDWA, source water protection has become a national priority. States are required to develop a plan for assessment of source waters for all federally defined public groundwater and surface water systems.

The Source Water Assessment Program (SWAP) involves determining the boundaries of the areas that are the source of waters for public water systems. For groundwater systems, these areas are defined using groundwater flow models. For surface water systems, a distance of 15 miles upstream from the surface water intake is the designated protection area (although certain areas within the basin will be segmented as being of greater vulnerability to contamination from overland flow, groundwater contributions to surface water, and direct spills into the surface water). Known and potential sources of contamination in the delineated area must be identified, and the inventoried sources evaluated to determine the susceptibility of public water systems to such contaminants. Assessments must be made available to the public.

Local involvement is a critical factor in the success of the SWAP, and local governments, citizen groups, environmental groups, water suppliers, and SCDHEC must all work together to increase the general public's awareness of where drinking water comes from and how to better protect sources of drinking water. Implementation of source water protection activities largely occur at the local level, and local authorities may wish to base zoning and land-use planning on the source water assessments. The SWAP is a key part of SCDHEC's watershed management approach. To avoid duplication, information gathered from existing regulatory programs and/or watershed protection efforts is utilized (e.g., ambient monitoring programs, TMDLs, etc.).

Consumer Confidence Reports

The Consumer Confidence Report (CCR) is an annual water quality report required of all community water systems. The rationale behind the CCR is that consumers have a right to know what is in their drinking water and where it comes from. These reports are to educate consumers and help them make informed choices that affect the health of themselves and their families. All CCRs are to include the following basic components:

- the water source, its location, and the availability of source water assessment plan;
- information about the water system
- definitions of terms and abbreviations used in the report;
- table of detected contaminants including the known or likely source of the contaminants;
- the health effects language for Maximum Contaminant Level violations and an explanation of the violation;
- information on cryptosporidium, radon, and other contaminants if applicable; and
- educational information that includes an explanation of contaminants and their presence in drinking water, an advisory for immuno-compromised people, the Safe Drinking Water Hotline telephone number, and other statements about lead, arsenic, and nitrate if applicable.

Nonpoint Source Outreach Assistance

The Bureau's Nonpoint Source (NPS) Outreach program is an integral component of the State's NPS management and Watershed program. The NPS Outreach program supports South Carolina's NPS water quality improvement goals through a capacity building approach. The NPS Outreach program provides outreach resources and materials to communities, organizations and municipalities as they develop their NPS outreach plans. Available resources include a Web-based NPS outreach toolbox tailored for South Carolina specific NPS issues. For more information please call 803-898-4300 or go to www.scdhec.gov/environment/water/or.htm.

Swimming Advisory Outreach

SCDHEC tests rivers, lakes and streams all over the State. Sometimes these tests show high amounts of bacteria for some streams and rivers. DHEC puts up a swimming advisory sign where high amounts of bacteria have been found and people commonly swim. The Bureau of Water uses this as a springboard for awareness of NPS issues and steps citizens can take to reduce their contributions to runoff pollution. For more information on the swimming advisories call the hotline at 1-800-360-5655. Information and tips on reducing NPS can be found on the swimming advisory website at www.scdhec.gov/environment/water/swim.htm.

Fish Advisory Outreach

Based on fish tissue monitoring results assessing mercury levels, SCDHEC and SCDHEC of Natural Resources work together to provide annual fish consumption advisories that tell you the right amounts and types of fish to eat in South Carolina. The advisories particularly focus on providing statewide advice for at-risk women and children. For more information and the most current advisories, please visit http://www.scdhec.gov/fish or call the Fish Consumption Advisory hotline at (888) 849-7241.

Champions of the Environment

Champions of the Environment encourages, enables and recongnizes youth environmental education projects that develop awareness, promote behavior change or improve and protect our water, air and land. Champions has been rewarding South Carolina's kindergarten through twelfth-grade students and teachers since 1993. Grants and cash awards enabled schools and communities to participate in activities such as protecting nesting sea turtles, reducing a school's carbon footprint, and protecting water quality; all positively impacting the environment and developing young, environmental stewards. Champions is a unique public-private partnership between DHEC, industry partners, and the media. For more information contact the Champions of the Environment coordinator at 803-898-4300 or visit www.scdhec.gov/environment/water/champion.htm.

Water Efficiency Outreach

In South Carolina, a growing population has placed greater demands on water supplies. Reducing household water use becomes part of the solution to maintaining adequate water supplies and protecting water resources. DHEC's Bureau of Water encourages household water use efficiency through the promotion of EPA's WaterSense program. WaterSense encourages water-efficient behaviors and the purchase of quality products that use less water. For more information about WaterSense call the Bureau of Water at (803) 898-4300 or go to http://www.scdhec.gov/environment/water/or.htm.

Clean Water State Revolving Fund

Congress created the Clean Water State Revolving Fund (SRF) in 1987, to replace the §201 Construction Grants program. In doing so, 'state banks' were created to lend money for virtually any type of water pollution control infrastructure project. Project types include construction of wastewater treatment systems and nonpoint source pollution control. The interest rate on the loans is always below the current market rate. As repayments are made on the loans, funds are recycled to fund additional water protection projects. The vast majority of the SRF funds have been used for the construction of traditional municipal wastewater treatment systems. Because of its inherent flexibility, the SRF program is well suited to accommodate the watershed approach.

SRF loans are available to units of state, local, and regional government, and special purpose districts. South Carolina law prevents loans from being made directly to private organizations and individuals. Local governments such as cities and counties and other units of government such as Soil and Water Conservation Districts, Councils of Government, and Water and Sewer Districts are encouraged to apply for SRF loans for nonpoint source projects. Nonpoint source projects may include construction and maintenance of stormwater management facilities, establishment of a stormwater utility, purchase of land for wetlands and riparian zones, and implementation of source water protection assessments. For more information, visit www.scdhec.gov/srf .

Citizen-Based Watershed Stewardship Programs

Throughout the Saluda River Basin, water quality is a common interest among citizen groups. The issues and membership of these groups vary widely. Some of the citizen groups interested in water quality in the Saluda River Basin are described below. To view the most current listing, visit our webpage at http://www.scdhec.gov/environment/water/shed/org.htm.

Upstate Forever

Upstate Forever is a membership-based nonprofit organization that promotes sensible growth and protects special places in the Upstate region of South Carolina. The organization works across ten counties: Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, Oconee, Pickens, Spartanburg, and Union. Upstate Forever has three main program areas: Land Trust, Clean Air & Water, and Sustainable Communities. Founded in 1998, Upstate Forever has over 2,000 members, a staff of 21 (full- and part-time), and two offices — their main office in Greenville and an office in Spartanburg. For more information, visit http://www.upstateforever.org.

Friends of the Reedy River (FORR)

The Friends of the Reedy River (FORR) is a 700-plus membership based in Greenville, SC. FORR is a non-profit organization that is dedicated to protecting and restoring the Reedy River and its tributaries. The volunteer driven organization was founded over ten years ago and continues to work to recover the river's natural, historic, cultural, and economic value. FORR operates as a land trust to protect sensitive wetlands and riverside forests through land acquisitions and conservation easements on private property. FORR works to restore the natural beauty and value of the river, and has identified and catalogued damaged creeks and streams throughout the watershed. FORR acts as an advocate and speaks on behalf of the river to City and County Councils, Planning Boards, the Public Service Commission, the S.C. Legislature, and to various civic groups and schools. FORR works to protect the river from pollution and contaminants through the enforcement of water quality regulations when storm water run-off or pollution threatens the river's recovery. For more information, visit http://www.friendsofthereedyriver.org.

Lake Conestee Park and the Conestee Foundation

The Conestee Foundation works to stabilize and restore an urban lake located south of Greenville on the Reedy River. Originally impounded in the early 19th century, Lake Conestee has received generations of upstream pollutants. It is suspected to contain extensive contaminated sediments. As a condition of acquiring the property, the Foundation entered into an agreement with SCDHEC to obtain a voluntary clean up contract to obtain Superfund liability protection. In cooperation with state and federal partners, extensive analysis of the site has been accomplished and with local

cooperation there are plans to upgrade the dam, establish an environmental education center, and acquire some additional adjacent properties for passive recreation. For more information, visit http://conesteepark.com.

Preserving Lake Greenwood

Preserving Lake Greenwood began as a grassroots organization in 2009 comprised of individuals who meet monthly to discuss various lake issues, but most importantly, water quality in the lake. The organization has gained support from several local, state, and federal elected officials. As membership continues to grow, it has become a registered SC non-profit organization. The organization's mission is to preserve and restore the quality of Lake Greenwood for current and future generations through education and advocacy. For more information, visit www.preservinglakegreenwood.org.

Lake Murray Association

The Lake Murray Association is comprised of a variety of lake users including shoreline residents, boaters, fishermen, and businesses. They work to educate the public on water quality and quantity issues and interact with state and federal agency personnel, elected officials, and the local hydroelectric utility (SCE&G) to protect and enhance Lake Murray's resources. For more information, visit http://www.lakemurrayassociation.com.

Lake Murray Watch

Lake Murray Watch is a watchdog group that maintains oversight of development and water quality issues on and around the Lake Murray. They interact with state and federal officials as well as the operator of the reservoir, SCE&G, to ensure that appropriate oversight of regulated activities occurs in the vicinity of the Lake. For more information, visit http://www.lakemurraywatch.com.

Friends of Congaree Swamp

Friends of Congaree Swamp is an advocate for conservation and recreational interests in the Congaree National Park. They have worked to enhance the recognition, public awareness, and appreciation of the outstanding national resource that exists in the midlands of South Carolina. They have been involved in recreational enhancements, park clean ups, public education, and research in and around the Park. For more information, visit http://www.friendsofcongaree.org

Gills Creek Watershed Association

The Gills Creek Watershed Association is dedicated to restoring and protecting the Gills Creek Watershed by uniting citizens, government, businesses, and organizations. The Association is made up of interested citizens, residents in the watershed, neighborhood groups, government regulators,

and elected officials. The Association is working to coordinate and provide public input to jurisdictional activities that will improve water quality as well as implement their own activities. Additionally, the Association is dedicated to educating the public on ways they can improve water quality within this watershed. For more information, visit http://www.gillscreekwatershed.org/.

Palmetto Paddlers Canoe and Kayak Club

Palmetto Paddlers is a non-profit association dedicated to encouraging exploration of recreational waterways, preservation of waterways, and protection of the forests, parks, and wildlife occurring in watersheds. They promote the enjoyment and appreciation of wilderness cruising and whitewater sports. Palmetto paddlers have sponsored water quality education events. Members frequently weigh in on water quality related issues at public meetings and represent water quality and recreational interests on various river-related committees and councils. For more information, visit http://www.palmettopaddlers.org.

Lower Saluda Scenic River Advisory Council

The Lower Saluda Scenic River Advisory Council guides the implementation of the Lower Saluda River Corridor Plan. The Council works towards conserving the unique qualities of the river and its watershed. Water quality, riparian conservation, recreation, and safety are some of the issues the Council is involved in. The Council has been a strong river advocate in negotiations surrounding wastewater planning in the Midlands region. The SCDNR administers the State Scenic River Program. For more information, visit http://www.dnr.sc.gov/water/envaff/river/scenic/saluda.html.

Trout Unlimited: Saluda River Chapter

South Carolina's Saluda River Trout Unlimited Chapter has been very active in water quality issues for many years. Besides fishing, the Chapter interacts with personnel at state and federal agencies, as well as the private sector on water quality planning, regulation, and enforcement issues in several areas in the Saluda River Basin and the State. Member representatives speak at community public hearings and file comments on government decisions that impact fishery resources. For more information, visit
http://www.saludatu.org/.

The River Alliance

The Columbia based River Alliance works to improve recreational opportunities on and near the river, preserve the natural riverine environment along the river bank, and protect the watershed draining to the Saluda, Broad, and Congaree Rivers. With municipal partners, the Alliance has constructed an extensive greenway along the Congaree and Broad Rivers enhancing the public's ability to experience the riparian environment. Community development is a fundamental part of the Alliance's activities. For more information, visit http://www.riveralliance.org.

Congaree Riverkeeper

The Congaree Riverkeeper is a non-profit organization protecting the Lower Broad, Lower Saluda and Congaree Rivers in the Three Rivers Area of the Midlands. As a member of the Waterkeeper Alliance, the Congaree Riverkeeper acts as a watchdog for the area's rivers and creeks. For more information, visit http://www.congareeriverkeeper.org.

Sustainable Midlands

Sustainable Midlands is a project of the Conservation Voters of South Carolina Education Fund. The organization strives to preserve and enhance the quality of life in the Midlands of South Carolina by providing education and facilitating communication among citizens and community leaders about creating communities that have clean air and water and support principles of sustainability. For more information, visit http://www.sustainablemidlands.org.

Save Our Saluda

Save Our Saluda (SOS) is a non-profit watershed advocacy organization in northern Greenville County that was established in January of 2008. The SOS mission statement is "Protecting and restoring the Saluda Watershed through environmental awareness and citizen action". For more information, visit www.saveoursaluda.org.

American Rivers: Blue Trails

In order to protect South Carolina's river heritage for future generations, we need to maintain and enhance river corridors for recreation, clean water and wildlife. Designated water trails, known as Blue Trails, help to make rivers more inviting places for both people and wildlife. A Blue Trail is a dedicated stretch of river that enjoys special clean water safeguards and is a destination for fishing, boating and other recreation. Just as hiking trails help people explore the land, Blue Trails help people discover rivers and provide a connection between both urban and rural communities, and the outdoors. The Congaree River Blue Trail (http://congareeriverbluetrail.blogspot.com/) connects citizens in Columbia to the Congaree National Park.

Clean Stream Award

The City of Columbia sponsors an annual Clean Stream Award, a competitive award program which supports community improvement and public education efforts within the City that reduce water quality impacts from stormwater runoff. Proposed projects fall into one of two categories: cleaning up local waterways or stormwater behavior campaigns. More information about the program can be found online at http://www.columbia.sc.gov/cleanstream/.

Saluda River Basin Description

The ***Saluda River Basin (hydrologic unit 03050109)*** is located in Greenville, Pickens, Anderson, Abbeville, Laurens, Greenwood, Newberry, Saluda, Lexington, and Richland Counties, and encompasses 2,523 square miles. The 21 watersheds extend from the Blue Ridge (mountain) through the Piedmont and into the Sand Hills. The Saluda River Basin encompasses 1,614,856 acres of which 53.7% is forested land, 26.1% is agricultural land, 12.9% is urban land, 4.2% is water, 2.1% is forested wetland, and 1.0% is barren land. The urban land is comprised of the Cities of Greenville and Columbia, and to a lesser extent the Cities of Laurens and Newberry. There are a total of 5,609 stream miles and 69,198 acres of lake waters in the Saluda River Basin.

The Oolenoy River flows into the South Saluda River, which merges with the North Saluda River to form the Saluda River. Downstream from the confluence, the Saluda River flows past the City of Greenville and is joined by Georges Creek, Big Brushy Creek, Big Creek, and Broad Mouth Creek before forming the headwaters of Lake Greenwood. The Reedy River is joined by Huff Creek and flows through Boyd Mill Pond before joining the Saluda River in the Lake Greenwood headwaters. Rabon Creek flows out of Lake Rabon and into the Reedy River arm of Lake Greenwood. Just downstream of the lake, Ninety Six Creek flows into the Saluda River near the Town of Greenwood. The Little River originates near the City of Laurens and drains into the Saluda River between Lakes Greenwood and Murray. The Saluda River together with the Little Saluda River and the Bush River then form the headwaters of Lake Murray. The Saluda River emerges from the Lake Murray dam and joins the Broad River Basin at the City of Columbia to form the Congaree River. The Broad River Basin is addressed in year five of the Bureau's five-year basin cycle.

Physiographic Regions

The USDA Soil Conservation Service divided the State of South Carolina into six Major Land Resource Areas (MLRAs). The MLRAs are physiographic regions that have soils, climate, water resources, and land uses in common. The physiographic regions defining the Saluda River Basin are as follows:

The **Blue Ridge** is an area of dissected (separated by erosion into many closely spaced valleys), rugged mountains with narrow valleys dominated by forests; elevations range from 1,000 to 3,300 feet.

The **Piedmont** is an area of gently rolling to hilly slopes with narrow stream valleys dominated by forests, farms and orchards; elevations range from 375 to 1,000 feet.

The **Sand Hills** are an area of gently sloping to strongly sloping uplands with a predominance of sandy areas and scrub vegetation; elevations range from 250 to 450 feet.

Land Use/Land Cover

General land use/land cover mapping for South Carolina was derived from the National Land Cover Data (NLCD). The dataset is based on nationwide Landsat Thematic Mapper (TM) multispectral satellite images (furnished through the Multi-Resolution Land Characteristics (MRLC) consortium, coordinated by USEPA) using image analysis software to inventory the Nation's land classes. The NLCD are developed by the USGS (EROS Data Center) using TM image interpretation, air photo interpretation, National Wetland Inventory data analysis, and ancillary data analysis.

Urban land is characterized by man-made structures and artificial surfaces related to industrial, commercial, and residential uses, as well as vegetated portions of urban areas.

Agricultural/Grass land is characterized by cropland, pasture, and orchards and may include some grass cover in urban, scrub/shrub, and forest areas.

Forest land is characterized by deciduous and evergreen trees not including forests in wetland settings.

Forested Wetland (swampland) is the saturated bottomland, mostly hardwood forests that are primarily composed of wooded swamps occupying river floodplains and isolated low-lying wet areas, primarily located in Coastal Plain.

Nonforested Wetland (marshland) is dependent on soil moisture to distinguish it from Scrub/Shrub since both classes contain grasses and low herbaceous cover; nonforested wetlands are most common along the coast and isolated freshwater areas found in the Coastal Plain.

Barren land is characterized by an unvegetated condition of the land, both natural (rock, beaches, unvegetated flats) and man-induced (rock quarries, mines, and areas cleared for construction in urban areas or clearcut forest areas).

Water (non-land) includes both fresh and tidal waters.

Soil Types

The individual soil series for the Saluda River Basin are described as follows.

Appling soils are well drained, deep soils, brownish to red, firm clay in the main part of the subsoil, found on narrow to broad ridges.

Ashe soils are shallow to moderately deep, well drained to excessively drained soils in steep areas.

Cecil soils are deep, well drained, gently sloping to sloping soils that have red subsoil.

Davidson soils are deep, gently sloping to strongly sloping, well drained to somewhat poorly drained soils with a loamy surface layer and clayey subsoil.

Georgeville soils are gently sloping to sloping, well drained and moderately well drained soils.

Hayesville soils are moderately shallow to deep, well drained soils in gently sloping to steep areas, with red to yellow-brown subsoil.

Helena soils are gently sloping to sloping, moderately well drained to well drained soils.

Herndon soils are gently sloping to sloping, well drained and moderately well drained soils.

Hiwassee soils are well drained, moderately sloping soils with clayey subsoil, moderately deep.

Lakeland soils are well drained, sandy soils with a loamy subsoil and excessively drained soils.

Louisburg soils are well drained to excessively drained, shallow to deep soils, mainly red to yellowish-brown, friable to firm sandy clay loam to clay on narrow ridges and side slopes.

Madison soils are well drained, moderately sloping soils, with clayey subsoil, moderately deep.

Pacolet soils are well drained, moderately steep soils with clayey subsoil, moderately deep.

Tatum soils are dominantly sloping to steep, well drained to excessively drained soils, with a loamy subsoil, moderately deep or shallow to weathered rock.

Wilkes soils are dominantly strongly sloping to steep, well drained soils.

Slope and Erodibility

The definition of soil erodibility differs from that of soil erosion. Soil erosion may be more influenced by slope, rainstorm characteristics, cover, and land management than by soil properties. Soil erodibility refers to the properties of the soil itself, which cause it to erode more or less easily than others when all other factors are constant.

The soil erodibility factor, K, is the rate of soil loss per erosion index unit as measured on a unit plot, and represents an average value for a given soil reflecting the combined effects of all the soil properties that significantly influence the ease of soil erosion by rainfall and runoff if not protected. K values closer to 1.0 represent higher soil erodibility and a greater need for best management practices to minimize erosion and contain those sediments that do erode. The range of K-factor values in the Saluda River Basin is from 0.22 to 0.43.

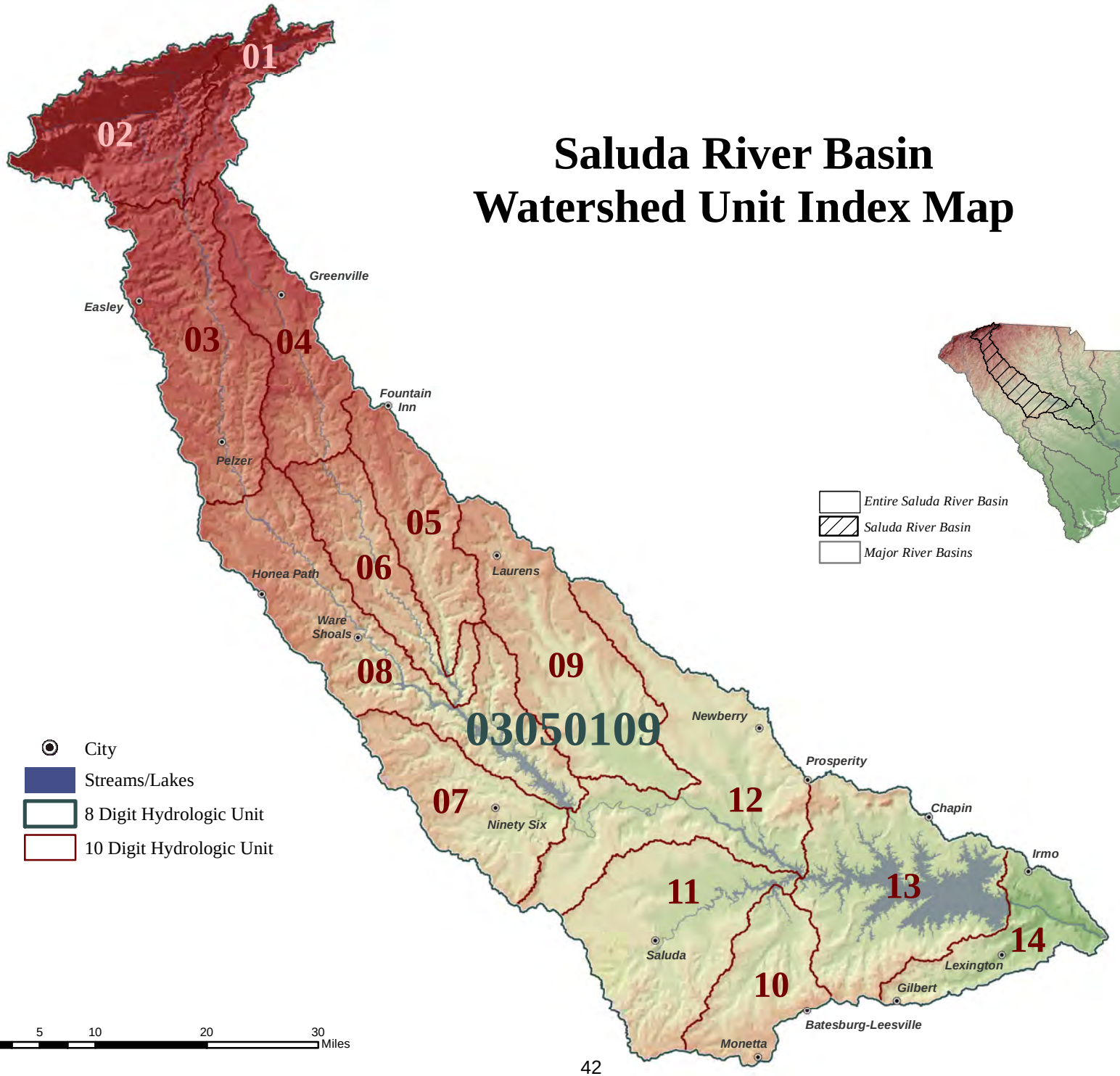
Fish Consumption Advisory

At the time of publication, a fish consumption advisory issued by SCDHEC is in effect for portions of the ***Saluda River*** and ***Lake Conestee*** advising people to limit the amount of some types of fish consumed from these waters. The advisory ***does not include*** Lake Greenwood or Lake Murray. Fish consumption advisories are updated annually in the spring. For background information and the most current advisories please visit the Bureau of Water homepage at http://www.scdhec.gov/water and click on “Advisories.” For more information or a hard copy of the advisories, call SCDHEC’s Fish Consumption Advisory toll-free hotline at (888) 849-7241.

Climate

Normal yearly rainfall in the Saluda River area during the period of 1971 to 2000 was 51.81 inches, according to South Carolina's **30-year** climatological record. Data compiled from National Weather Service stations in Caesars Head, West Pelzer, Greenwood, Laurens, Chappells, Cleveland, Ware Shoals, Little Mountain, and Newberry were used to determine the general climate information for the Saluda River area. The highest seasonal rainfall occurred in the winter with 13.68 inches; 13.09, 13.00, and 12.05 inches of rain fell in the spring, summer, and fall, respectively. The average annual daily temperature was 59.7 °F. Winter temperatures averaged 42.4°F, spring temperatures averaged 59.2 °F and summer and fall mean temperatures were 76.4 °F and 60.6 °F, respectively.

Saluda River Basin
Watershed Unit Index Map



Watershed Evaluations

03050109-01

(North Saluda River)

General Description

Watershed 03050109-01 (formerly 03050109-010) is located in Greenville County and consists primarily of the ***North Saluda River*** and its tributaries. The watershed occupies 48,411 acres of the Blue Ridge and Piedmont regions of South Carolina. Land use/land cover in the watershed includes: 79.2% forested land, 11.5% agricultural land, 6.7% urban land, 2.0% water, 0.3% barren land, and 0.3% forested wetland (swamp).

The North Saluda River originates near the State boundary with North Carolina and flows through Poinsett Reservoir, which is also known as the North Saluda Reservoir. Tributaries of Poinsett Reservoir include: Brice Creek, Brushy Creek, Big Falls Creek (Fall Creek, Posey Creek, Guest Creek), and Little Falls Creek. The portion of the North Saluda River from its headwaters to and including Poinsett Reservoir (drinking water reservoir for the City of Greenville) and its tributaries are classified ORW. The North Saluda River flows out of Poinsett Reservoir and accepts drainage from Calahan Branch, Beaverdam Creek (Terry Creek, Short Branch), Sprigg Creek, Bull Creek, and Talley Creek. Another Beaverdam Creek enters the river near the Town of Marietta, as does Whitmire Branch. The river and its tributaries downstream of Poinsett Reservoir are classified FW. There are a total of 191.3 stream miles and 1,142.0 acres of lake waters in this watershed. Pleasant Ridge State Park is located in this watershed.

Surface Water Quality

Station #	Type	Class	Description
S-292	W	ORW	POINSETT RESERVOIR AT WATER INTAKE
S-088	W	FW/ORW	NORTH SALUDA RIVER AT S-23-42, 5.2 MI NNW OF TIGERVILLE
S-773	BIO	FW	NORTH SALUDA RIVER AT U.S. 25
S-004	INT	FW	N. SALUDA R. AT BRIDGE ABOVE JUNC.W/SALUDA R. E OF SC 186

North Saluda Reservoir or Poinsett Reservoir (S-292) - Aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. A significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

North Saluda River - There are three SCDHEC monitoring stations along the North Saluda River. At the upstream site ***(S-088)***, aquatic life and recreational uses are fully supported; however, there is a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. Significant decreasing trends in turbidity and fecal coliform bacteria concentration

suggest improving conditions for these parameters. At the midstream station ***(S-773),*** aquatic life use is partially supported based on macroinvertebrate community data. At the downstream site ***(S-004)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
PLEASANT RIDGE COUNTY PARK	23-N13
NORTH SALUDA RIVER TRIBUTARY	ACTIVE
CAMP OLD INDIAN	23-N08
CALAHAN BRANCH	ACTIVE

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM	***NPDES#***
FACILITY NAME	***TYPE***
NORTH SALUDA RIVER	SCG250012
JPS CONVERTER & INDUSTRIES	MINOR INDUSTRIAL
NORTH SALUDA RIVER	SC0026883
WCRSA/SLATER/MARIETTA	MINOR DOMESTIC
NORTH SALUDA RIVER	SCG645014
GVWS/TABLE ROCK & N. SALUDA WTP	MINOR DOMESTIC

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	
NORTH SALUDA RIVER	SCS230001
UNINCORPORATED AREAS	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	

Water Quantity

WATER USER	***REGULATED CAPACITY (MGD)***
WATERBODY	***PUMPING CAPACITY (MGD)***
GREENVILLE WATER SYSTEM	90.0
NORTH SALUDA RESERVOIR	60.0

Growth Potential

There is a low potential for development within this mountainous watershed, which contains a portion of the Town of Slater-Marietta. A portion of the watershed is protected by the City of Greenville and the Nature Conservancy as the Greenville Water Commission Watershed.

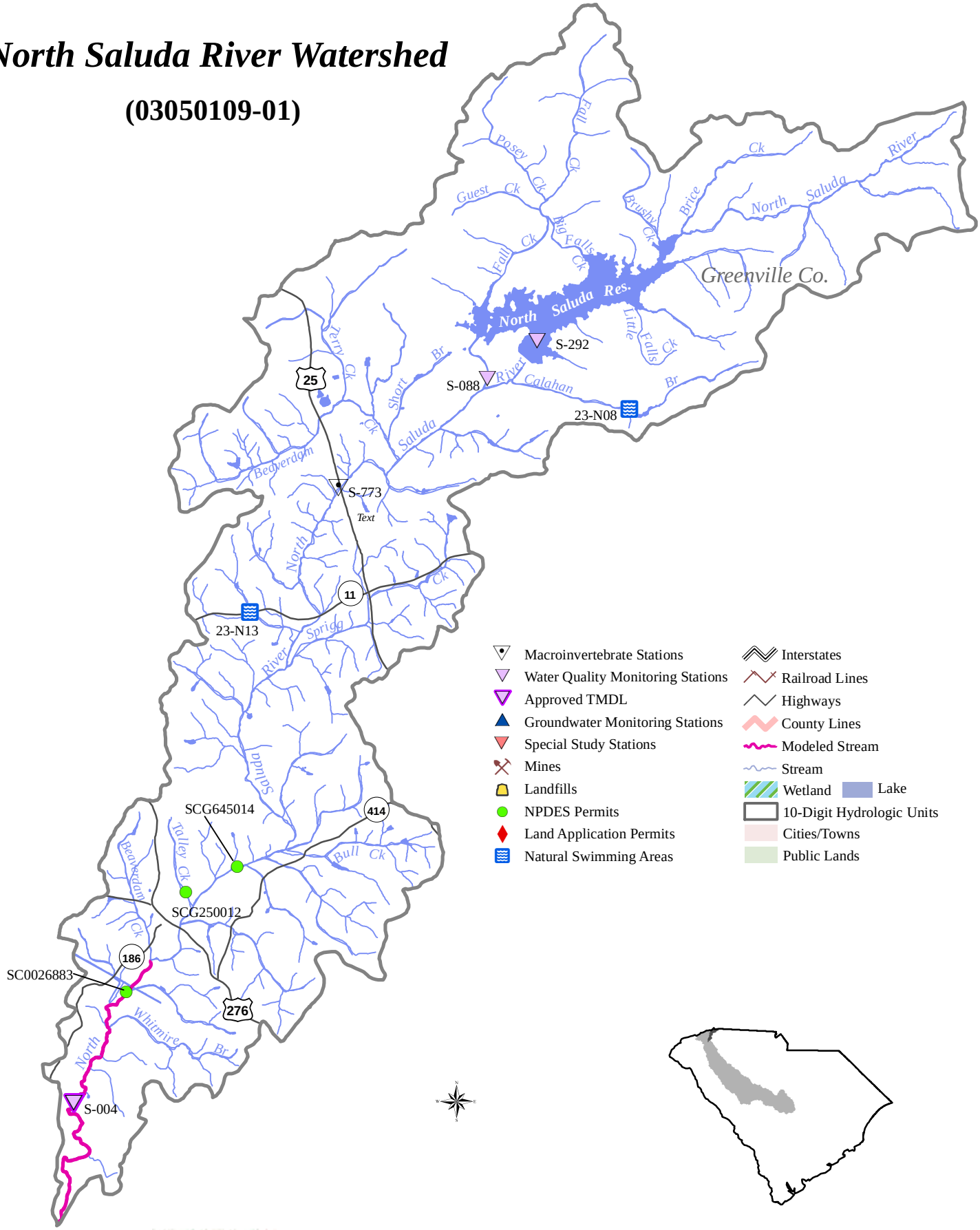
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

A TMDL was developed for SCDHEC and approved by EPA for the **North Saluda River** at water quality monitoring site S-004. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There was one NPDES facility permitted to discharge fecal coliform bacteria in this watershed. The entire watershed is in a designated MS4. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, agricultural activities, and wildlife. The TMDL requires a reduction of 60% in fecal coliform loading for this stream to meet the recreational use standard.

North Saluda River Watershed

(03050109-01)



03050109-02

(South Saluda River)

General Description

Watershed 03050109-02 (formerly 03050109-020, 030) is located in Pickens and Greenville Counties and consists primarily of the ***South Saluda River*** and its tributaries. The watershed occupies 109,617 acres of the Blue Ridge and Piedmont regions of South Carolina. Land use/land cover in the watershed includes: 83.9% forested land, 9.6% agricultural land, 4.8% urban land, 0.6% water, 0.6% forested wetland (swamp), and 0.5% barren land.

The South Saluda River flows through Table Rock Reservoir and is joined by several tributaries before merging downstream with the North Saluda River. The headwaters of the South Saluda River accepts drainage from Laurel Creek (Big Spring Creek, Rock Laurel Branch) and Flat Rock Creek before entering Table Rock Reservoir. Slicking Creek (Little Table Rock Creek, Chestnut Cove) and Galloway Branch flow directly into the reservoir. Matthews Creek (Julian Creek) enters the South Saluda River below the reservoir followed by West Fork (Wattacoo Creek, Robinson Branch), Tall Pines Lakes, Duck Creek, and the Oolenoy River. Tributaries of the Oolenoy River include Willis Creek, Emory Creek, Rachael Creek, Mill Creek, Carrick Creek (Green Creek, Pinnacle Lake, Oolenoy Lake), Adams Creek (Molly Branch), Weaver Creek (Burgess Creek, Cisson Creek), Hawk Creek, and Gowens Creek. Downstream from the Oolenoy River, the South Saluda River accepts drainage from Spain Creek, the Middle Saluda River, Peters Creek, and Carpenters Creek before draining into the Saluda River. The most predominant tributary to the South Saluda River is the Middle Saluda River, which originates in Caesars Head State Park and accepts drainage from Lake Rotary, Coldspring Branch, Cox Camp Creek, Rock Branch, Buck Hollow, and Head Foremost Creek. Gap Creek (Falls Creek, Trammell Lake, Friddle Lake, Bluff Branch, Tankersly Branch, Peters Branch, Cherry Branch) enters the Middle Saluda River next followed by Oil Camp Creek, Jane Branch, Devils Fork Creek, Cox Creek (Grissom Branch), Mill Creek, Wolf Creek, and Spout Spring Branch.

The South Saluda River it classified ORW from its headwaters through and including Table Rock Reservoir to the dam, classified TGPT from the dam to Hwy 8, and beyond that point classified FW. Julian Creek is classified ORW. Matthews Creek is classified ORW from its headwaters to the end of State land in the Mountain Bridge area, and classified TN from that point to its confluence with the South Saluda River. The South Saluda River is classified TPGT from the Table Rock Reservoir dam to the crossing of S.C. Hwy 8. Willis Creek and Emory Creek are classified ORW from their headwaters to the northern boundary of Table Rock Resort property, and from that point to its confluence with the Oolenoy River are classified TN. The Oolenoy River is classified TPGT from its headwaters to Emory Creek and FW beyond that point. Green Creek and the headwaters of Carrick Creek through and including Pinnacle Lake are classified ORW. The Middle Saluda River, from its headwaters to the end of State land at Jones Gap State Park is

classified ORW, from that point to Oil Camp Creek is classified TN. Oil Camp Creek is classified ORW from its headwaters to the end of State land, and the remainder of the stream is classified TN. Coldspring Branch and Head Foremost Creek are classified ORW, and Falls Creek is ORW from its headwaters to Lake Trammell. Lake Trammell and the remainder of Falls Creek are classified TN. The entire reach of Gap Creek, together with Cox Camp Creek, Rock Branch, and Buck Hollow are classified TN, and the Middle Saluda River is classified TN from the end of State land to Oil Camp Creek.

There are a total of 417.5 stream miles and 693.2 acres of lake waters in this watershed. With the exception of the ORW, TN, and TGPT streams mentioned above, the remaining streams are classified FW. Other natural resource areas in this watershed include Table Rock State Park, Caesars Head State Park, and Jones Gap State Park. A five-mile segment of the Middle Saluda River is protected under the South Carolina Scenic Rivers Program. Table Rock Reservoir is used for municipal purposes only by the Greenville Water Commission.

Surface Water Quality

Station #	Type	Class	Description
S-291	W	ORW	TABLE ROCK RESERVOIR AT WATER INTAKE
S-320	W	TPGT	SOUTH SALUDA RIVER AT S-39-113 (TABLE ROCK ROAD)
S-086	BIO	TN	MATTHEWS CREEK AT S-23-90
S-771	BIO	FW	SOUTH SALUDA RIVER AT SC ROUTE 11
S-087	W	FW	SOUTH SALUDA RIVER AT S-23-101
RL-02307	RL02	FW	LAKE OOLENOY, SAMPLED FROM SOUTH SIDE OF SC 11 BRIDGE
S-798	W	FW	LAKE OOLENOY AT DRAIN NEAR SPILLWAY AT SC 11
RS-02330	RS02	FW	ADAMS CREEK AT UNPAVED RD FROM SC 8 AND END OF S-39-34
S-103	INT/BIO	FW	OOLENOY RIVER AT S-39-47
S-076	BIO	ORW	MIDDLE SALUDA RIVER AT JONES GAP STATE PARK
S-077	W	TN	MIDDLE SALUDA RIVER AT S-23-41
S-317	BIO	TN	OIL CAMP CREEK AT S-23-097
RS-04530	RS04/BIO	FW	MIDDLE SALUDA RIVER AT S-23-97
S-252	W	FW	MIDDLE SALUDA RIVER AT SC 288, 2.3 MILES WSW SLATER
S-980	BIO	FW	CARPENTER CREEK AT PACE BRIDGE RD NE OF SC 186/SC 135 INTERSECTION
S-299	INT	FW	SOUTH SALUDA RIVER AT SC 186

Table Rock Reservoir (S-291) - Aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. A significant increasing trend in dissolved oxygen concentration and a decreasing trend in fecal coliform bacteria concentration suggest improving conditions for these parameters.

South Saluda River - There are four SCDHEC monitoring stations along the South Saluda River. At the furthest upstream site ***(S-320)***, aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Further downstream ***(S-771)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the next site downstream ***(S-087)***, aquatic life uses are fully

supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. At the furthest downstream site ***(S-299)***, aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. Significant increasing trends in dissolved oxygen concentration and decreasing trends in total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Matthews Creek (S-086) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Lake Oolenoy **-** There are two SCDHEC monitoring stations along Lake Oolenoy **(*RL-02307, S-798*).** Aquatic life and recreational uses are fully supported at both sites; however, there is a significant increasing trend in five-day biochemical oxygen demand at the downstream site ***(S-798)***. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter at the downstream site.

Adams Creek (RS-02330) **-** Aquatic life and recreational uses are fully supported.

Oolenoy River (S-103) **-** Aquatic life uses are partially supported based on macroinvertebrate community data. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration and significant increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Middle Saluda River – There are four SCDHEC monitoring stations along the Middle Saluda River. Aquatic life use at the furthest upstream site ***(S-076)*** is fully supported based on macroinvertebrate community data. At the next station downstream ***(S-077)***, aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Further downstream ***(RS-04530)***, aquatic life and recreational uses are fully supported based on macroinvertebrate community data. At the furthest downstream site ***(S-252)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Oil Camp Creek (S-317) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Carpenter Creek (S-980) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
CAMP GREENVILLE	23-N11
MIDDLE SALUDA RIVER TRIBUTARY	ACTIVE
PALMETTO BIBLE CAMP	23-N22
FRIDDLE LAKE/FALLS CREEK	ACTIVE
CAMP WABAK	23-N07
GAP CREEK	ACTIVE
AWANITA VALLEY	23-N06
MIDDLE SALUDA RIVER	ACTIVE
WESLEYAN CAMP	39-N01
PINNACLE LAKE	ACTIVE
TABLE ROCK STATE PARK	39-N06
MILL CREEK	ACTIVE

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-108	GB	PIEDMONT BEDROCK	CAESAR'S HEAD
AMB-071	GB	SAPROLITE	PICKENS SHALLOW
AMB-082	GB	PIEDMONT BEDROCK	PICKENS DEEP

All water samples collected from ambient monitoring wells ***AMB-086, AMB-071,*** and ***AMB-082*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM	***NPDES#***
FACILITY NAME	***TYPE***
SOUTH SALUDA RIVER	SC0003191
MILLIKEN & CO./GAYLEY PLANT	MAJOR INDUSTRIAL
MATTHEWS CREEK	SC0029742
ASBURY HILLS CAMP & RETREAT	MINOR DOMESTIC
CARRICK CREEK	SC0024856
SCDPRT/TABLE ROCK STATE PARK	MINOR DOMESTIC

SOUTH SALUDA RIVER	SCG730273
B&B SAND/MARIETTA MINE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	
SOUTH SALUDA RIVER	SCS230001
----------	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
JAMES OWENS LCD LANDFILL	232758-1701
C&D	ACTIVE

Mining Activities

MINING COMPANY	***PERMIT #***
MINE NAME	***MINERAL***
HENDRIX SAND COMPANY	0717-77
HENDRIX MINE	SAND
INSTREAM DREDGING (SOUTH SALUDA RIVER)	
B&B SAND	0640-77
MARIETTA MINE #1	SAND

Water Quantity

WATER USER	***REGULATED CAPACITY (MGD)***
WATERBODY	***PUMPING CAPACITY (MGD)***
GREENVILLE WATER SYSTEM	45.0
TABLE ROCK RESERVOIR	30.0

Growth Potential

There is an overall low potential for development or intensive agriculture in this watershed, however; there is a high potential for low density residential and tourist commercial development where Scenic SC Hwy. 11 crosses the watershed. Several small residential subdivisions have been constructed, and wastewater disposal for these new areas are by septic tanks. The watershed is predominately protected as park and forest by Caesars Head and Table Rock State Parks. The primary uses of the watershed are recreation and preservation; however, some relatively small clear and selective cut timber harvesting activities occur on the private land holdings. US 276 crosses the watershed, but very little development occurs along the thoroughfare to North Carolina.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

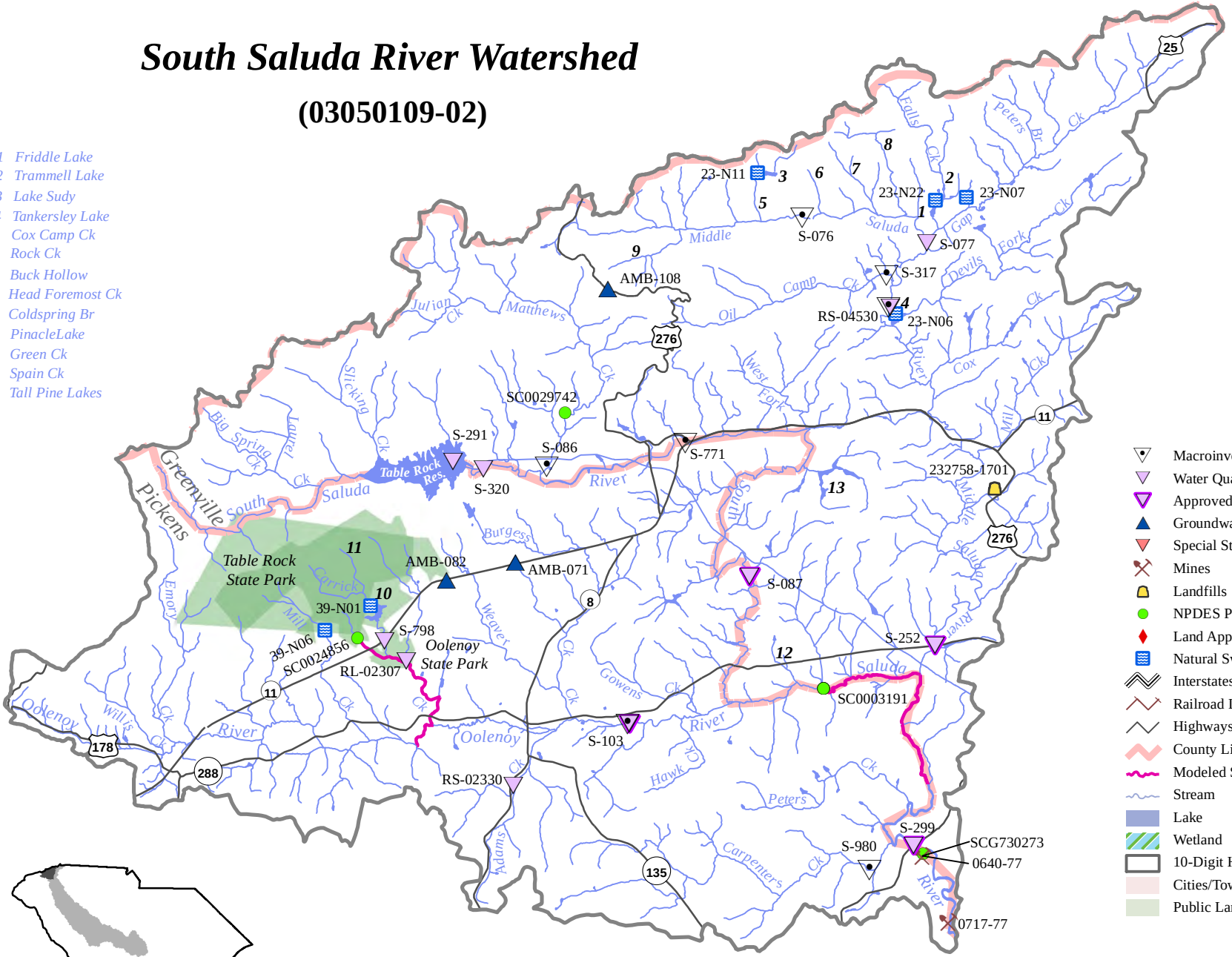
TMDLs were developed for SCDHEC and approved by EPA for the **South Saluda River and the Middle Saluda River** at water quality monitoring sites S-087, S-252, and S-299. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There were two permitted NPDES facilities that are permitted to discharge fecal coliform bacteria in this watershed. All of the Middle Saluda River watershed and most of the South Saluda River watershed have been designated as MS4s. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDLs require reductions of 32% to 69% in fecal coliform loading for these streams to meet the recreational use standard.

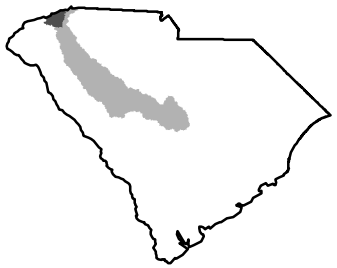
A TMDL was developed for SCDHEC and approved by EPA for the **Oolenoy River** at water quality monitoring site S-103. There was one permitted NPDES facility that is permitted to discharge fecal coliform bacteria in this watershed. No part of this watershed has been designated as a MS4. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDL requires a reduction of 69% in fecal coliform loading for this stream to meet the recreational use standard.

South Saluda River Watershed

(03050109-02)

1 Friddle Lake
2 Trammell Lake
3 Lake Sudy
4 Tankersley Lake
5 Cox Camp Ck
6 Rock Ck
7 Buck Hollow
8 Head Foremost Ck
9 Coldspring Br
10 PinacleLake
11 Green Ck
12 Spain Ck
13 Tall Pine Lakes





Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Lake
Wetland
10-Digit Hydrologic Units
Cities/Towns
Public Lands

D H E C
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South Carolina Department of Health and Environmental Control

0 1 2 4 6 Miles

03050109-03

(Saluda River)

General Description

Watershed 03050109-03 (formerly 03050109-040, 050, 060, 070) is located in Pickens, Greenville, and Anderson Counties and consists primarily of the ***Saluda River*** and its tributaries from its origin to Big Creek. The watershed occupies 148,672 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 44.6% forested land, 29.9% agricultural land, 21.4% urban land, 2.0% forested wetland (swamp), 1.1% water, and 1.0% barren land.

The Saluda River is formed by the confluence of the North Saluda River and the South Saluda River Watersheds. Tributaries draining into the upper portion of this watershed include Shoal Creek, Armstrong Creek, Machine Creek (Doddies Creek), Rutledge Lake, and Coopers Creek. The Saluda River then flows through Saluda Lake in the City of Greenville, and is joined by Mill Creek, Georges Creek (Mad Dog Branch, Burdine Creek, Georges Creek Lake, Hamilton Creek, Middle Creek, East Creek, Little Georges Creek, Crayton Creek), Craven Creek, Big Brushy Creek (Brushy Creek, Middle Branch, Hornbuckle Creek, Little Brushy Creek), and Hurricane Creek. Grove Creek (Little Grove Creek, Mill Creek) enters the river next, followed by Big Creek (Big Creek Reservoir, Camp Creek, Camp Creek Reservoir), near the Town of Williamston. This watershed contains a total of 635.9 stream miles and 1,153.1 acres of lake waters, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-991	BIO	FW	Shoal Creek at Deer Creek rd NE of SC186/SC135 intersection
S-866	BIO	FW	Shoal Creek at SR 140
S-250	W	FW	Saluda Lake at Farr's bridge on SC 183, 7mi NE of Easley
S-314	W	FW	Saluda Lake, 0.5 miles upstream of landing
RL-03349	RL03	FW	Saluda Lake, 0.9 mi SE of SC 183 in small arm
RL-06427	RL06	FW	Saluda Lake, 0.7 mi N of dam
RL-05401	RL05	FW	Saluda Lake, 0.13 mi NE of dam
S-315	W	FW	Mill Creek at Bent Bridge Road, below Carolina Plating
S-005	W	FW	Georges Creek Tributary at S-39-192, 2.6 miles NE of Easley
RS-06151	RS06/BIO	FW	Burdine Creek at bridge on S-39-192, 3 miles NE of Easley
S-865	BIO	FW	Georges Creek at road above SR 36
S-300	INT	FW	Georges Creek at S-39-28
S-007	W	FW	Saluda River at SC 81, SW of Greenville
S-301	INT/BIO	FW	Big Brushy Creek at S-04-143
S-267	W	FW	Saluda River Trib. 350 ft below W. Pelzer WWTP on S-23-53
S-171	W	FW	Grove Creek below JP Stevens Estes Plant
S-774	BIO	FW	Grove Creek at S-23-541
RS-02462	RS02/BIO	FW	Grove Creek at S-23-52
S-119	INT	FW	Saluda River at S-04-178, 3.2 miles SE Williamston
S-302	INT/BIO	FW	Big Creek at S-04-116

Shoal Creek – There are two SCDHEC monitoring stations along Shoal Creek (S-991, S-866). Aquatic life uses at both sites are fully supported based on macroinvertebrate community data.

Saluda Lake - Saluda Lake is a 500-acre impoundment on the Saluda River, with a maximum depth of approximately 40.0 ft and an average depth of approximately 7.9 ft. The lake's watershed comprises 263.0 square miles. There are five monitoring sites along Saluda Lake. At the furthest uplake site ***(S-250)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions. Further downlake ***(S-314)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are partially supported due to fecal coliform bacteria excursions. At the midlake site ***(RL-03349)***, aquatic life uses are fully supported, but recreational uses are partially supported due to fecal coliform bacteria excursions. At the two furthest downlake sites ***(RL-06427, RL-05401)***, aquatic life and recreational uses are fully supported.

Mill Creek (S-315) – Aquatic life uses are not supported due to occurrences of chromium in excess of the aquatic life chronic criterion. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

Georges Creek Tributary (S-005) – Aquatic life uses are fully supported and significant increasing trends in dissolved oxygen concentration and decreasing trends in turbidity suggest improving trends for these parameters. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions.

Burdine Creek (RS-06151) – Aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are fully supported.

Georges Creek - There are two SCDHEC monitoring stations along Georges Creek. At the upstream site ***(S-865)***, aquatic life uses are partially supported based on macroinvertebrate community data. Aquatic life uses are partially supported at the downstream site ***(S-300)*** due to occurrences of copper in excess of the aquatic life chronic criterion. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Saluda River – There are two SCDHEC monitoring stations along this section of the Saluda River. At the upstream site ***(S-007)***, aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. At the downstream site ***(S-119)***, aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Big Brushy Creek (S-301) - Aquatic life uses are partially supported based on macroinvertebrate community data. In addition, there are significant increasing trends in five-day biochemical oxygen demand, total phosphorus concentration, and total nitrogen concentration. Recreational uses are not supported due to fecal coliform bacteria excursions.

Saluda River Tributary (S-267) - Aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions.

Grove Creek - There are three SCDHEC monitoring stations along Grove Creek. At the upstream site ***(S-171)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Recreational uses are partially supported due to fecal coliform bacteria excursions. At the midstream site ***(S-774)***, aquatic life uses are partially supported based on macroinvertebrate community data. At the downstream site ***(RS-02462)***, aquatic life uses are fully supported based on macroinvertebrate community data. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Big Creek (S-302) - Aquatic life uses are partially supported based on macroinvertebrate community data. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM ***FACILITY NAME***	***NPDES#*** ***TYPE***
SALUDA RIVER DUKE ENERGY CORP./LEE STEAM STATION	SC0002291 MAJOR INDUSTRIAL
SALUDA RIVER REWA/PIEDMONT WWTP	SC0023906 MAJOR DOMESTIC

SALUDA RIVER REWA/PIEDMONT REGIONAL WWTP	SC0048470 MAJOR DOMESTIC
SALUDA RIVER TOWN OF PELZER	SC0040797 MINOR DOMESTIC
SALUDA RIVER REWA/GEORGES CREEK PLT	SC0047309 MAJOR DOMESTIC
SALUDA RIVER TRIBUTARY VULCAN CONSTR. MAT. CO./LAKESIDE	SCG730245 MINOR INDUSTRIAL
SALUDA RIVER TRIBUTARY TOWN OF WEST PELZER WWTF	SC0025194 MINOR DOMESTIC
SALUDA LAKE EASLEY COMBINED UTIL./DON L. MOOORE	SCG641007 MINOR DOMESTIC
SALUDA LAKE SALUDA LAKE ASSOC. MINE	SCG730563 MINOR INDUSTRIAL
BIG BRUSHY CREEK TRIBUTARY KING ASPHALT/ELROD MINE	SCG730479 MINOR INDUSTRIAL
SALUDA RIVER KING ASPHALT/THRIFT MINE	SCG730480 MINOR INDUSTRIAL
SALUDA RIVER PALMETTO AGGREGATES LLC/RIVER ROAD PLANT	SCG730628 MINOR INDUSTRIAL
SALUDA RIVER THOMAS SAND CO./COMBINED UTILITY	SCG730629 MINOR INDUSTRIAL
GROVE CREEK REWA/GROVE CREEK WWTP	SC0024317 MAJOR DOMESTIC
GROVE CREEK TRIBUTARY CYTEC CARBON FILTERS LLC	SCG250197 MINOR INDUSTRIAL
GROVE CREEK TRIBUTARY UNITED UTILITIES/VALLEY BROOK WWTP	SC0028673 MINOR DOMESTIC
GEORGES CREEK EASLEY/GEORGES CREEK LAGOON	SC0023043 MINOR DOMESTIC
BURDINE CREEK ALICE MANUFACTORING/ELLISON PLT	SC0001171 MINOR INDUSTRIAL
HAMILTON CREEK TRIBUTARY EASLEY SITE TRUST	SC0046396 MINOR INDUSTRIAL
MIDDLE BRANCH EASLEY COMBINED UTILITY/MIDDLE BRANCH WWTP	SC0039853 MAJOR DOMESTIC
SALUDA RIVER TRIBUTARY BLYTHE CONSTR./BENT BRIDGE MINE	SCG730695 MINOR INDUSTRIAL

SALUDA RIVER TRIBUTARY	SC0048429
AIR PRODUCTS & CHEMICALS INC.	MINOR INDUSTRIAL
HURRICANE CREEK TRIBUTARY	SCG731070
SLOAN CONSTR./I-85 MINE #3	MINOR INDUSTRIAL
HURRICANE CREEK TRIBUTARY	SCG250260
SNIDER TIRE INC./PELZER PLANT	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	
GROVE CREEK	SCS230001
UNINCORPORATED AREAS	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	
GROVE CREEK	SCR030702
UNINCORPORATED AREAS	PHASE II
ANDERSON COUNTY	SMALL MS4
ANDERSON COUNTY	
GROVE CREEK	SCR037701
CITY OF EASLEY	PHASE II
CITY OF EASLEY	SMALL MS4
CITY OF EASLEY	
GROVE CREEK	SCR037704
UNINCORPORATED AREAS	PHASE II
PICKENS COUNTY	SMALL MS4
PICKENS COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
PLATT SACO LOWELL INC.	---------
INDUSTRIAL	INACTIVE
PIEDMONT SANITARY LANDFILL	---------
MUNICIPAL	INACTIVE
BLACKBERRY VALLEY LANDFILL	----------
MUNICIPAL	INACTIVE
ANDERSON REGIONAL LANDFILL	042651-1101
MUNICIPAL	ACTIVE

BIG CREEK C&D LANDFILL C&D&LT	041001-1202 INACTIVE
BIG CREEK MATERIAL RECOVERY FACILITY C&D	041001-2002 INACTIVE
BIG CREEK MUNICIPAL SW LANDFILL MUNICIPAL	041001-1102 INACTIVE
DUKE POWER (LEE STEAM STATION) INDUSTRIAL	-------- INACTIVE
TOWN OF WILLIAMSTON COMPOSTING COMPOSTING	041004-3001 ACTIVE
GREENVILLE COUNTY MUNICIPAL	---------- INACTIVE
WCA SHILOH WOOD PROC. FACILITY COMPOSTING	232644-3001 ACTIVE
WCA SOLID WASTE PROC. FACILITY MUNICIPAL	232644-2001 ACTIVE
SOUTHERN GRADING III SITE COMPOSTING	232701-3003 ACTIVE
JP STEVENS & CO. INDUSTRIAL	--------- INACTIVE
AMOCO CELL/CONSTR. LANDFILL INDUSTRIAL	233333-1201 INACTIVE
AMOCO PERFORMANCE PRODUCTS, INC. INDUSTRIAL	--------- INACTIVE
JONES BROTHERS GRADING C&D LANDFILL C&D	232439-1201 ACTIVE

Mining Activities

MINING COMPANY ***MINE NAME***	***PERMIT #*** ***MINERAL***
THOMAS SAND CO. RIVER ROAD PLANT	0908-07 SAND
KING ASPHALT SALUDA RIVER SITE	1328-07 SAND/RIVER
SALUDA LAKE ASSOC. SALUDA LAKE MINE	1103-77 SAND
VULCAN CONSTR. MATERIALS CO. LAKESIDE QUARRY	0064-45 GRANITE

VULCAN CONSTR. MATERIALS CO. ANDERSON QUARRY	0059-07 GRANITE
THOMAS SAND CO., INC. COMBINED UTILITY SITE	1359-77 SAND/RIVER

Water Quantity

WATER USER ***STREAM***	***REGULATED CAPACITY (MGD)*** ***PUMPING CAPACITY (MGD)***
EASLEY COMBINED UTILITY SALUDA LAKE	34.0 24.0

Growth Potential

The Towns of Pelzer, West Pelzer, Williamston, Powdersville, Piedmont, and Golden Grove, along with portions of the City of Easley and the Towns of Berea, Parker, Welcome, Duncan, and Gantt are located in this watershed. The upper area of the watershed has a fairly low potential for extensive development or intensive agricultural (other than orchards), except for nonintensive agricultural and low density residential activity along the Saluda River. The central and lower regions of the watershed have a relatively high potential for urban development; rail lines run through these areas along the Saluda River. Significant growth is projected along both sides of the Saluda River from S.C. 183 to Williamston. The Town of Williamston, although not a high growth area, is expected to experience low to moderate growth. A rail line crosses the watershed running from Williamston to the Town of Pelzer (en route to the City of Greenville) and contributes to the growth in the area. The Southern Connector combined with I-85 interchanges and highway improvements of US 25 and SC 20 will continue to spur industrial and commercial growth. The Saluda River bisects the US 123 high growth corridor between the Cities of Easley and Greenville.

The area north and east of Easley to the Saluda River has been cited in the Appalachian Regional Development Plan as an infrastructure expansion area with potential for both industrial and residential growth. The area where US 123 crosses this watershed is lined with strip shopping centers, fast food restaurants, and large parking areas. Behind this line of fast development are located both residential and industrial areas. The southern edge of the City of Easley and the I-85 corridor are high growth areas in the watershed. Other areas of potential growth are the presently unserved interstate interchanges, which have regional plans to be upgraded with water and sewer to encourage development. Regional wastewater facilities have been upgraded to allow for growth. There are also several industrial sites dispersed through the watershed.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for the **Saluda River** and a tributary at water quality monitoring sites S-007, S-250, and S-267. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality

standards. There were three permitted NPDES facilities that are permitted to discharge fecal coliform bacteria located on the Saluda River and its tributary upstream of these impaired sites. Much of the Saluda River watershed has been designated as a MS4, but none the watershed of the tributary. Probable sources of fecal coliform bacteria that were identified in the watershed are leaking sewers, SSOs, failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDLs require reductions of 33% to 80% in fecal coliform loading for these streams to meet the recreational use standard.

A TMDL was developed for SCDHEC and approved by EPA for **Mill Creek** at water quality monitoring site S-315. Data from SCDHEC ambient monitoring station S-315 on Mill Creek shows that recreational uses are not supported due to violations of the 400/100 ml fecal coliform criterion. Station S-315 is also considered impaired for aquatic life use based on observed elevated levels of zinc and chromium. However, this TMDL will address only the recreational use impairment. Probable sources of fecal coliform bacteria are those found in urbanized areas and may include leaking sewers, SSOs, failing septic systems, and fecal matter from urban wildlife populations. The TMDL requires a reduction of 61% in fecal coliform loading for this stream to meet the recreational use standard.

TMDLs were developed for SCDHEC and approved by EPA for **Georges Creek** at water quality monitoring sites S-005 and S-300. There were two permitted NPDES facilities that are permitted to discharge fecal coliform bacteria in the watershed. Parts of the Georges Creek watershed have been designated as MS4s. Probable sources of fecal coliform bacteria that were identified in the watershed are leaking sewers, SSOs, failing septic systems, agricultural runoff, cattle-in-streams, urban runoff, and wildlife. The TMDL requires a reduction of 64% in fecal coliform loading for both sites for this stream to meet the recreational use standard.

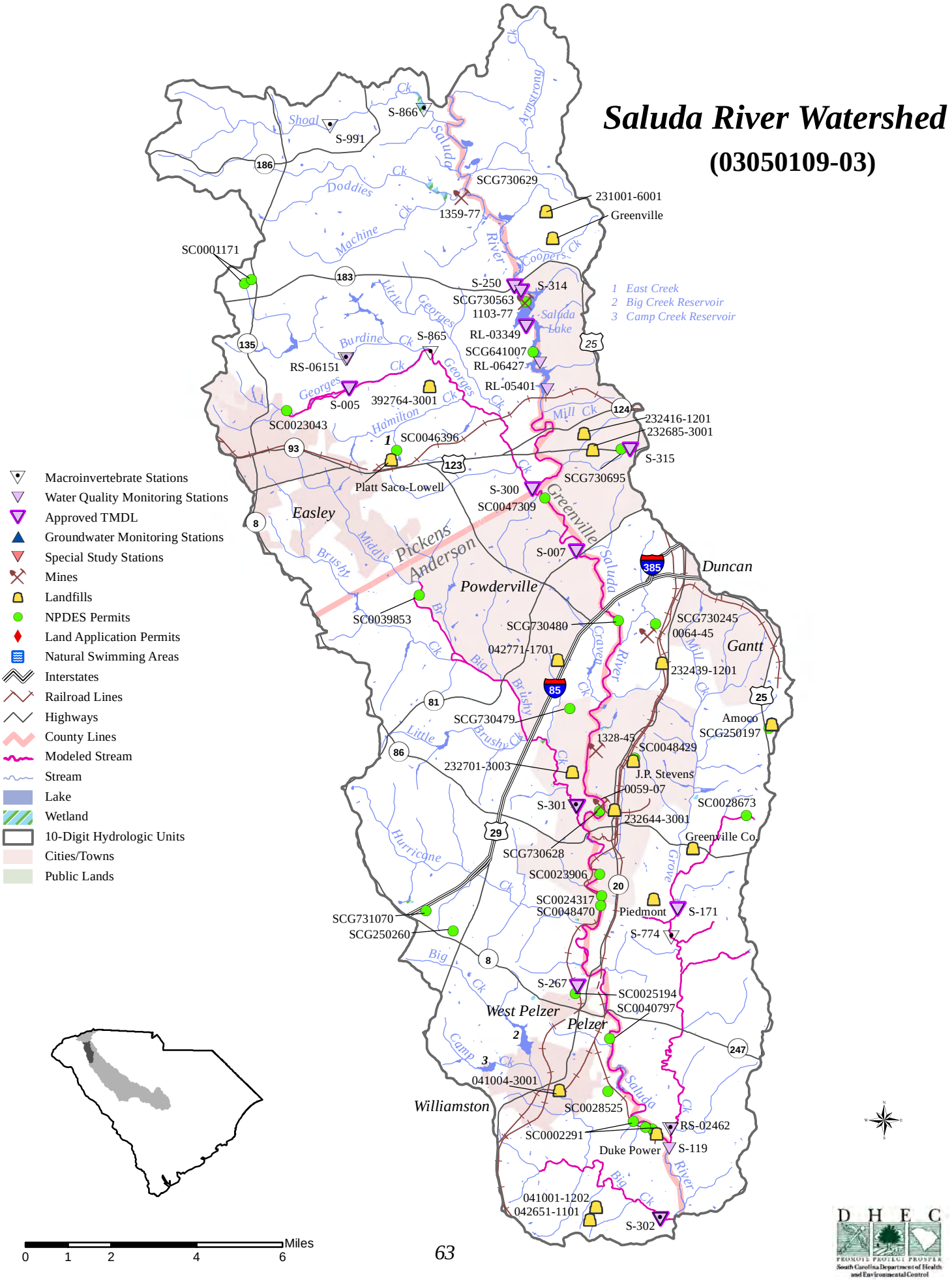
A TMDL was developed for SCDHEC and approved by EPA for **Grove Creek** at water quality monitoring site S-171. There was no NPDES facility permitted to discharge fecal coliform bacteria in this watershed. The Grove Creek watershed is entirely within one or more designated MS4s. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, agricultural activities, and wildlife. The TMDL requires a reduction of 72% in fecal coliform loading for this stream to meet the recreational use standard.

A TMDL was developed for SCDHEC and approved by EPA for **Big Creek** at water quality monitoring site S-302. There was no NPDES facility permitted to discharge fecal coliform bacteria in this watershed. At this time there are no designated MS4s in the Big Creek watershed. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, agricultural activities, and wildlife. The TMDL requires a reduction of 46% in fecal coliform loading for this stream to meet the recreational use standard.

A TMDL was developed for SCDHEC and approved by EPA for **Big Brushy Creek** at water quality monitoring site S-301. There is one NPDES facility permitted to discharge fecal coliform bacteria in this watershed. The Big Brushy Creek watershed is mostly within areas designated as

MS4s. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, agricultural activities, and wildlife. The TMDL requires a reduction of 52% in fecal coliform loading for this stream to meet the recreational use standard.

Saluda River Watershed
(03050109-03)



03050109-04

(Reedy River)

General Description

Watershed 03050109-04 (formerly 03050109-100, 110) is located in Greenville County and consists primarily of the upper ***Reedy River*** and its tributaries from its origin to Huff Creek. The watershed occupies 96,591 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 44.5% urban land, 30.3% forested land, 21.2% agricultural land, 2.8% forested wetland (swamp), 0.6% water, and 0.6% barren land.

The Reedy River originates near the Town of Travelers Rest and flows through the City of Greenville downstream to the Town of Fork Shoals, where it accepts the drainage of Huff Creek (Baker Creek (Trollingwood Lake), Little Creek), Swan Lake, Little Creek, Langston Creek, Long Branch, Richland Creek, and Brushy Creek (Cow Creek). The river then accepts drainage from Marrow Bone Creek, flows through Conestee Lake, and accepts drainage from Laurel Creek near the Donaldson Industrial Park. Maddog Creek and Rocky Creek drain into the river further downstream. A portion of Paris Mountain State Park resides in this watershed. There are a total of 356.9 stream miles and 693.2 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-073	W	FW	REEDY R. AT UNNUMBERED ROAD OFF US 276, 3/4 MI. E OF TRAVELERS REST
S-265	BIO	FW	LANGSTON CREEK AT OLD BUNCOMB ROAD
S-264	W	FW	LANGSTON CREEK AT SC 253
S-319	W	FW	REEDY RIVER AT RIVERS STREET, DOWNTOWN GREENVILLE
S-981	BIO	FW	RICHLAND CREEK AT E. NORTH STREET
S-067	W	FW	BRUSHY CREEK ON GREEN STREET EXT, BELOW DUNEAN MILL ON SC 20
S-867	BIO	FW	BRUSHY CREEK AT SR 30
S-139	BIO	FW	LAUREL CREEK AT MAULDIN ROAD
RS-06167	RS06/BIO	FW	REEDY RIVER TRIBUTARY IN THE PRESERVE AT PLANTERS ROW SD
S-323	SPRP	FW	REEDY RIVER AT S-23-316 3.5 MILES SSW OF MAULDIN
S-972	BIO	FW	BALDWIN CREEK AT MOORE ROAD
S-091	W/BIO	FW	ROCKY CREEK AT S-23-453, 3.5 MILES SW OF SIMPSONVILLE
S-833	BIO	FW	REEDY RIVER AT SR 542
S-982	BIO	FW	HARRISON CREEK AT S. HARRISON BRIDGE ROAD
S-072	INT	FW	REEDY RIVER ON HWY 418 AT FORK SHOALS
S-983	BIO	FW	HUFF CREEK AT GRIFFIN MILL ROAD
S-984	BIO	FW	BAKER CREEK TRIBUTARY AT ALVERSON ROAD
S-863	BIO	FW	HUFF CREEK AT SR 459
S-178	INT	FW	HUFF CREEK AT SC 418, 1.6 MI NW OF FORK SHOALS
S-985	BIO	FW	LITTLE CREEK AT BERRY ROAD
S-834	BIO	FW	REEDY RIVER AT SR 154

Reedy River - There are six SCDHEC monitoring stations along this section of the Reedy River. At the furthest upstream site ***(S-073)***, aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total suspended solids. There is a significant increasing trend in pH. Recreational uses are partially supported due to fecal

coliform bacteria excursions. At the next site downstream site ***(S-319)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. Further downstream ***(S-323)***, aquatic life uses are fully supported. 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 not supported due to fecal coliform bacteria excursions. At the next site downstream ***(S-833)***, aquatic life is partially supported based on macroinvertebrate community data. Further downstream ***(S-072)***, aquatic life uses are fully supported. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the furthest downstream site ***(S-834)***, aquatic life is partially supported based on macroinvertebrate community data.

Langston Creek - There are two SCDHEC monitoring stations along Langston Creek. At the upstream site ***(S-265)***, aquatic life is partially supported based on macroinvertebrate community data. At the downstream site ***(S-264)***, aquatic life uses are fully supported. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Richland Creek (S-981) – Aquatic life is partially supported based on macroinvertebrate community data.

Brushy Creek – There are two SCDHEC monitoring stations along Brushy Creek. At the upstream site ***(S-067)***, aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and dissolved oxygen concentration. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the downstream site ***(S-867)***, aquatic life is partially supported based on macroinvertebrate community data.

Laurel Creek (S-139) – Aquatic life is partially supported based on macroinvertebrate community data.

Reedy River Tributary (RS-06167) - Aquatic life is partially supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions.

Baldwin Creek (S-972) – Aquatic life is partially supported based on macroinvertebrate community data.

Harrison Creek (S-982) – Aquatic life is partially supported based on macroinvertebrate community data.

Rocky Creek (S-091) - Aquatic life is partially supported based on macroinvertebrate community data. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions.

Huff Creek – There are three SCDHEC monitoring stations along Huff Creek. At the two upstream sites ***(S-983, S-863)***, aquatic life is partially supported based on macroinvertebrate community data. At the downstream site ***(S-178)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Baker Creek Tributary (S-984) – Aquatic life is partially supported based on macroinvertebrate community data.

Little Creek (S-985) – Aquatic life is fully supported based on macroinvertebrate community data.

A fish consumption advisory has been issued by SCDHEC for mercury and includes the impounded portions of Lake Conestee within this watershed (see advisory p.40).

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM ***FACILITY NAME***	***NPDES#*** ***TYPE***
REEDY RIVER REWA/LOWER REEDY RIVER PLT	SC0024261 MAJOR DOMESTIC
REEDY RIVER REWA/MAULDIN ROAD PLANT	SC0041211 MAJOR DOMESTIC
LITTLE CREEK ALTAMONT MOBILE HOME VILLAGE	SC0028533 MINOR DOMESTIC
BRUSHY CREEK TRIBUTARY SOUTHERN WATER TREATMENT CO.	SCG250165 MINOR INDUSTRIAL
COW CREEK MILLIKEN & CO./JUDSON PLT	SCG250026 MINOR INDUSTRIAL
MARROW BONE CREEK CRUCIBLE CHEMICAL CO.	SCG250139 MINOR INDUSTRIAL

LAUREL CREEK JOHN D. HOLLINGSWORTH ON WHEELS	SC0033774 MINOR INDUSTRIAL
HUFF CREEK CROWN METRO CHEMICALS INC.	SCG250091 MINOR INDUSTRIAL
BAKER CREEK UNITED UTILITIES/TROLLINGWOOD WWTP	SC0026611 MINOR DOMESTIC
BAKER CREEK UNITED UTILITIES/CANTERBURY WWTP	SC0028941 MINOR DOMESTIC
REEDY RIVER HITACHI ELEC. DEVICES USA, INC.	SC0048411 MINOR INDUSTRIAL
REEDY RIVER BURDETTE ENTERPRISES/CONESTEE	SCG730460 MINOR INDUSTRIAL
REEDY RIVER TRIBUTARY MORGAN CORP./CCG PROPERTY MINE	SCG731132 MINOR INDUSTRIAL
LAUREL CREEK CARTER EXCAVATIONS/MAULDIN ROAD MINE	SCG731037 MINOR INDUSTRIAL
BRUSHY CREEK TRIBUTARY SAFETY COMPONENT FAB/DUNEAN	SCG250075 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM ***MUNICIPALITY*** ***RESPONSIBLE PARTY*** ***IMPLEMENTING PARTY***	***NPDES#*** ***MS4 PHASE*** ***MS4 SIZE***
UPPER REEDY RIVER ---------- GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE I MEDIUM MS4
UPPER REEDY RIVER CITY OF GREENVILLE CITY OF GREENVILLE CITY OF GREENVILLE	SCR034501 PHASE II SMALL MS4
UPPER REEDY RIVER CITY OF MAULDIN GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE II SMALL MS4
UPPER REEDY RIVER CITY OF SIMPSONVILLE GREENVILLE COUNTY GREENVILLE COUNTY	SCS230001 PHASE II SMALL MS4

UPPER REEDY RIVER	SCS230001
CITY OF TRAVELERS REST	PHASE II
GREENVILLE COUNTY	SMALL MS4
GREENVILLE COUNTY	
UPPER REEDY RIVER	SCS230001
UNINCORPORATED AREAS	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
CITY OF GREENVILLE SANITARY LANDFILL	231002-1101
DOMESTIC	INACTIVE
GREATER GREENVILLE SANITATION COMM.	----------
DOMESTIC	INACTIVE
WCRSA	----------
INDUSTRIAL	INACTIVE
SOUTHERN GRADING II SITE	232701-3002
COMPOSTING	ACTIVE
GREENVILLE WOOD WASTE REC. CENTER	233335-3001
COMPOSTING	INACTIVE
GREENVILLE WOOD WASTE REC. CENTER II	232420-3001
COMPOSTING	ACTIVE
GREENVILLE LT & C&D LANDFILL	232441-1201
C&D	ACTIVE
CITY OF GREENVILLE TUB GRINDING OPERATION	231002-3001
COMPOSTING	INACTIVE
CITY OF GREENVILLE TUB GRINDING SITE	231002-3002
COMPOSTING	INACTIVE
CITY OF GREENVILLE LCD TRANSFER STATION	231002-6001
TS-LCD	ACTIVE
GREATER GREENVILLE SANITATION SHRED. FAC.	231003-3001
COMPOSTING	ACTIVE
FENNELL CONTAINER-GREENVILLE TRANS & PROC. FAC.	232441-2001
SWP & C&D	ACTIVE
ENOREE PHASE II MSW LF WASTE TIRE COLLECTION	231002-5301
WTC	ACTIVE

Land Applications

LAND APPLICATION FACILITY NAME	*PERMIT # TYPE*
PERCOLATION/EVAPORTATION BASIN	ND0082139
METROMONT MATERIALS/PARIS MTN	INDUSTRIAL

Mining Activities

MINING COMPANY MINE NAME	*PERMIT # MINERAL*
BURDETTE ENTERPRISES, INC.	1101-45
CONESTEE ROAD BORROW PIT	SAND, SAND/CLAY

Growth Potential

There is a high potential for growth in this watershed, which contains portions of the Cities of Travelers Rest, Greenville, Mauldin, and Simpsonville. The City of Greenville has a very high potential to continue as an urban growth area, particularly in the area south of the city. Both the I-85 and I-385 corridors are in this watershed and contribute greatly to the growth. There are a large number of existing industrial sites near the I-385 corridor, together with the Donaldson Center and several rail lines to encourage more industrial growth. The two large regional wastewater treatment facilities in the area (Lower Reedy River Plant, Mauldin Road Plant) have dramatically increased in size and should spur industrial growth. Greenville County's zoning boundary will extend southward to SC 418 and should promote medium density development. Clemson University's Automotive Research Park near I-85 and I-385 should promote industrial growth in the area as well.


Reedy River Watershed
(03050109-04)
Travelers Rest
Paris Mtn State Park
Berea
Greenville
Duncan
Gantt
Mauldin
Simpsonville
Greenville Co.
Conestee Lake
S-073
SC0028533
S-265
S-264
ND0082139
S-981
231003-3001
231002-3002
S-319
231001-5103
SCG250026
SCG250075
SC0001295
SCG250165
S-067
S-867
231002-3001
232441-1201
S-139
1101-45
SCG730460
SCG250139
SC0033774
SC0048411
SC0041211
WCRSA
232441-2001
SCG731132
231002-1101
SCG731037
RS-06167
SC0048071
232420-3001
232701-3002
SCG250091
S-323
S-972
S-983
S-091
SC0028941
SC0024261
S-833
SC0026611
S-982
S-984
S-863
S-072
S-178
S-985
S-834
Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Wetland
Lake
10-Digit Hydrologic Units
Cities/Towns
Public Lands
Miles
0
1
2
4
6
D H E C
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South Carolina Department of Health and Environmental Control

03050109-05

(Rabon Creek)

General Description

Watershed 03050109-05 (formerly 03050109-130) is located in Greenville and Laurens Counties and consists primarily of ***Rabon Creek*** and its tributaries from its origin to Lake Greenwood. The watershed occupies 81,531 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 52.7% forested land, 35.0% agricultural land, 7.9% urban land, 2.3% forested wetland (swamp), 1.4% water, and 0.7% barren land.

South Rabon Creek (Payne Branch, Bullit Branch) and North Rabon Creek (Stoddard Creek, Pumpkin Branch, Mountain Creek, Lick Creek) originate near the Town of Fountain Inn, and join together to form Lake Rabon near the City of Laurens. Rabon Creek (Dirty Creek, Burriss Creek) flows out of the Lake Rabon dam to form an arm of Lake Greenwood further downstream. There are a total of 293.3 stream miles and 414.9 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-859	BIO	FW	MOUNTAIN CREEK AT SR 32
S-321	W	FW	NORTH RABON CREEK AT S-30-32
RL-05411	RL05	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.8 MI UPSTREAM FROM DAM
S-313	W	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.5 MI UPSTREAM OF DAM
RL-02303	RL02	FW	LAKE RABON, NEAR NE SHORE AND BELOW US 76
S-860	BIO	FW	SOUTH RABON CREEK AT SR 77
S-322	W	FW	SOUTH RABON CREEK ON DIRT ROAD BETWEEN SC 101 & S-30-76
S-312	W	FW	LAKE RABON, SOUTH RABON CREEK ARM, AT S-30-312
RL-03359	RL03	FW	LAKE RABON, 0.6 MI SE OF S-30-312
RL-02305	RL02	FW	LAKE RABON, NEAR BOAT LANDING ON UNNAMED CO. RD OFF S-30-54
S-296	SUMM	FW	LAKE RABON, 300 FEET UPSTREAM OF DAM
S-096	INT/BIO	FW	RABON CREEK AT S-30-54, 8.8 MILES NW OF CROSS HILL
S-307	W	FW	LAKE GREENWOOD, RABON CREEK ARM, 0.8 KM N OF S-30-307

Mountain Creek (S-859) – Aquatic life uses are fully supported based on macroinvertebrate community data.

North Rabon Creek (S-321) – Aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions.

North Rabon Creek Arm of Lake Rabon – There are two SCDHEC monitoring stations along the North Rabon Creek Arm of Lake Rabon ***(RL-05411, S-313)*** and aquatic life and recreational uses are fully supported at both sites.

Lake Rabon - Lake Rabon is a 537-acre impoundment on Rabon Creek, with a maximum depth of approximately 27.2 feet and an average depth of approximately 13.1 feet. The lake's watershed comprises 89.7 square miles. There are four SCDHEC monitoring stations along Lake Rabon ***(RL-02303, RL-03359, RL-02305, S-296)*** and aquatic life and recreational uses are fully supported at all sites; however, there is a significant increasing trend in five-day biochemical oxygen demand at S-296. There is a significant increasing trend in pH. Although pH excursions occurred at this site, they were considered natural, not standards violations. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. *Fish tissue analyses on species caught from Lake Rabon indicate no advisories or restrictions on consumption of fish from these waters.*

South Rabon Creek – There are two SCDHEC monitoring stations along South Rabon Creek. At the upstream site ***(S-860)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the downstream site ***(S-322)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

South Rabon Creek Arm of Lake Rabon (S-312) – Aquatic life and recreational uses are fully supported. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

Rabon Creek (S-096) – Aquatic life are fully supported based on macroinvertebrate community data; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Rabon Creek Arm of Lake Greenwood (S-307) - Aquatic life and recreational uses are fully supported. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM ***FACILITY NAME***	***NPDES#*** ***TYPE***
MOUNTAIN CREEK FIBERWEB INC./GRAY COURT	SCG250208 MINOR INDUSTRIAL

PAYNE BRANCH TRIBUTARY	SCG250220
KS GLEITLAGER USA, INC.	MINOR INDUSTRIAL
MOUNTAIN CREEK	SC0032298
S & S WASHERETTE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	***COUNTY***
RABON CREEK	SCS230001
----------	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	
RABON CREEK	SCS230001
UNINCORPORATED AREAS	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	
RABON CREEK	SCS230001
CITY OF FOUNTAIN INN	PHASE II
GREENVILLE COUNTY	SMALL MS4
GREENVILLE COUNTY	GREENVILLE
RABON CREEK	SCS230001
CITY OF SIMPSONVILLE	PHASE II
GREENVILLE COUNTY	SMALL MS4
GREENVILLE COUNTY	
RABON CREEK	SCS230001
CITY OF FOUNTAIN INN	PHASE II
GREENVILLE COUNTY	SMALL MS4
GREENVILLE COUNTY	LAURENS

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
TRI CITY SERVICE	----------
INDUSTRIAL	INACTIVE
CURRY LAKE C&D LANDFILL	302693-1201
C&D	ACTIVE
RUBBER RECYCLING TECH./WASTE TIRE PROC.	232784-5201
WTP	ACTIVE

Water Quantity

WATER USER *STREAM*	*REGULATED CAPACITY (MGD)* *PUMPING CAPACITY (MGD)*
CITY OF LAURENS CPW	9.3
LAKE RABON	17.3
CITY OF LAURENS CPW	2.0
RABON CREEK	5.0

Growth Potential

This watershed contains portions of the Cities of Simpsonville, Fountain Inn, and Laurens and the Town of Gray Court. There is an increasing potential for growth along the I-385 corridor in the eastern portion of this watershed near the greater Laurens area. Many residential subdivisions and industrial sites are being constructed. Agricultural and silvicultural activities are prevalent in the western and central portion of the watershed. US 76 crosses Lake Rabon and the watershed en route to Laurens.

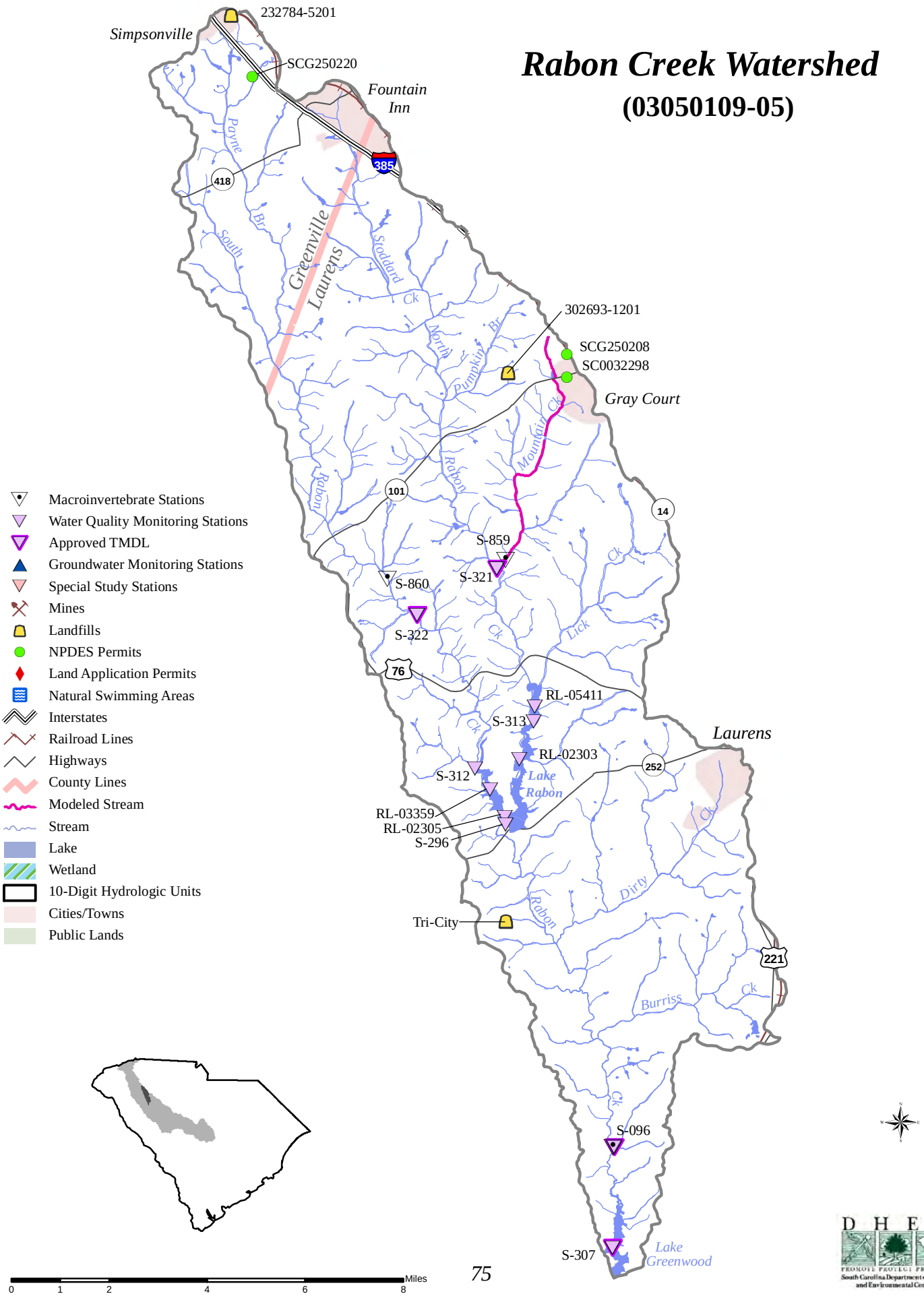
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for **Rabon Creek** at water quality monitoring sites S-096, S-307, S-321, and S-322. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There was one permitted wastewater treatment facility located on Mountain Creek, a tributary of North Rabon Creek. A small part of the watershed has been designated as a MS4. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, agricultural runoff, cattle-in-streams, and wildlife. The TMDLs require reductions of 3% to 65% in fecal coliform loading for this stream to meet the recreational use standard.

The nonpoint source component of the Rabon Creek TMDL is currently being implemented using §319 grant funds. Implementation was completed in November 2010. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.

Rabon Creek Watershed
(03050109-05)



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South Carolina Department of Health and Environmental Control

03050109-06

(Reedy River/Lake Greenwood)

General Description

Watershed 03050109-06 (formerly 03050109-120 plus the Reedy River Arm of Lake Greenwood) is located in Greenville and Laurens Counties and consists primarily of the lower ***Reedy River*** and its tributaries from Huff Creek to ***Lake Greenwood***. The watershed occupies 79,299 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 59.7% forested land, 29.7% agricultural land, 5.4% urban land, 2.4% forested wetland (swamp), 1.8% water, and 1.0% barren land.

This section of the Reedy River accepts drainage from the upper Reedy River watershed, Martin Creek, and Horse Creek before flowing through Boyd Mill Pond. The river then accepts the drainage from Walnut Creek and Long Lick Branch and forms an arm of Lake Greenwood. There are a total of 346.3 stream miles and 1,319.6 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-835	BIO	FW	REEDY RIVER AT SR 985
S-986	BIO	FW	MARTIN CREEK AT CRAIGS ROAD
S-778	BIO	FW	REEDY RIVER AT SR 68
S-862	BIO	FW	HORSE CREEK AT SR 69
S-070	W	FW	REEDY RIVER AT US 76
S-987	BIO	FW	WALNUT CREEK, WARE SHOALS EAST #1 AT SR 347
RL-05403	RL05	FW	BOYD MILL POND, 0.5 MI NW OF BRIDGE OVER REEDY RIVER ON SC 252
S-311	SUMM	FW	BOYD MILL POND 0.6 KM W OF DAM
S-861	BIO	FW	WALNUT CREEK AT SR 64
S-021	INT	FW	REEDY RIVER AT S-30-06, E OF WARE SHOALS
S-308	SUMM	FW	LAKE GREENWOOD, REEDY RIVER ARM 150YDS ABOVE RABON CREEK
S-022	W	FW	LAKE GREENWOOD, REEDY RIVER ARM AT S-30-29

Reedy River – There are four SCDHEC monitoring stations along this section of the Reedy River. At the furthest upstream site ***(S-835)***, aquatic life is partially supported based on macroinvertebrate community data. At the next site downstream site ***(S-778)***, aquatic life is fully supported based on macroinvertebrate community data. Further downstream ***(S-070)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. 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 partially supported due to fecal coliform bacteria excursions. At the furthest downstream site ***(S-021)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

***Martin Creek* (S-986) -** Aquatic life uses are fully supported based on macroinvertebrate community data.

Horse Creek (S-862) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Walnut Creek – There are two SCDHEC monitoring stations along Walnut Creek. Aquatic life uses are fully supported at both sites ***(S-987, S, 861)*** based on macroinvertebrate community data.

Boyd Mill Pond - Boyd Mill Pond is a 182-acre impoundment on the Reedy River, with a maximum depth of approximately 31.2 feet and an average depth of approximately 12.1 feet. The lake's watershed comprises 244.8 square miles. There are two SCDHEC monitoring stations along Boyd Mill Pond. At the upstream site ***(RL-05403)***, aquatic life uses are not supported due to pH and total phosphorus excursions. Recreational uses are fully supported. At the downstream site ***(S-311)***, aquatic life uses are not supported due to pH and total phosphorus excursions. In addition, there is a significant decreasing trend in dissolved oxygen concentration. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria concentration.

Reedy River Arm of Lake Greenwood – There are two SCDHEC monitoring stations along the Reedy River Arm of Lake Greenwood, and recreational uses are fully supported at both sites. At the upstream site ***(S-308)***, aquatic life uses are not supported due to pH and total phosphorus excursions. Significant decreasing trends in total phosphorus and total nitrogen concentration suggest improving conditions for these parameters. At the downstream site ***(S-022)***, aquatic life uses are not supported due to pH excursions. A significant decreasing trend in turbidity suggests improving conditions for this parameter. *Fish tissue analyses on species caught from Lake Greenwood indicate no advisories or restrictions on consumption of fish from these waters.*

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-062	GB	SAPROLITE	FORK SHOALS SHALLOW
AMB-079	GB	SAPROLITE	FORK SHOALS DEEP

All water samples collected from above ambient monitoring wells meet standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME***	***NPDES#*** / ***TYPE***
REEDY RIVER	SCG730035
WR GRACE & CO./MADDEN-KERNELLS MINE	MINOR INDUSTRIAL
HORSE CREEK	SCG730429
VULCAN CONSTR. MATERIALS CO./PRINCETON QUARRY	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM / ***MUNICIPALITY*** / ***RESPONSIBLE PARTY*** / ***IMPLEMENTING PARTY***	***NPDES#*** / ***MS4 PHASE*** / ***MS4 SIZE*** / ***COUNTY***
LOWER REEDY RIVER	SCS230001
----------	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME / ***FACILITY TYPE***	***PERMIT #*** / ***STATUS***
HR GARRET, INC. (GREENVILLE CO.)	232478-1701
C&D	ACTIVE
HR GARRET, INC. (LAURENS CO.)	232478-1701
LCD & YT	INACTIVE
TWIN CHIMNEYS C&D LANDFILL	231001-1202
C&D	ACTIVE
TWIN CHIMNEYS WASTE TIRE COLL. FACILITY	231001-5104
WTC	ACTIVE
TWIN CHIMNEYS WOOD CHIPPING FACILITY	231001-3002
COMPOSTING	ACTIVE
TWIN CHIMNEYS MSW LANDFILL	231001-1102
MUNICIPAL	ACTIVE
GRAMBLING BROTHERS CONTRACTING, INC.	232486-1701
C&D	ACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
WR GRACE & CO. MADDEN-KERNELLS MINE	0565-59 VERMICULITE
VULCAN CONSTR. MATERIALS CO. PRINCETON QUARRY	1072-45 GRANITE

Growth Potential

There is generally a low potential for growth in this watershed, which contains a portion of the Town of Waterloo. Some growth could result from the crossing of US 76 to the City of Laurens and from US 25 to the City of Greenville. Medium density residential areas should expand along the river in Laurens County.

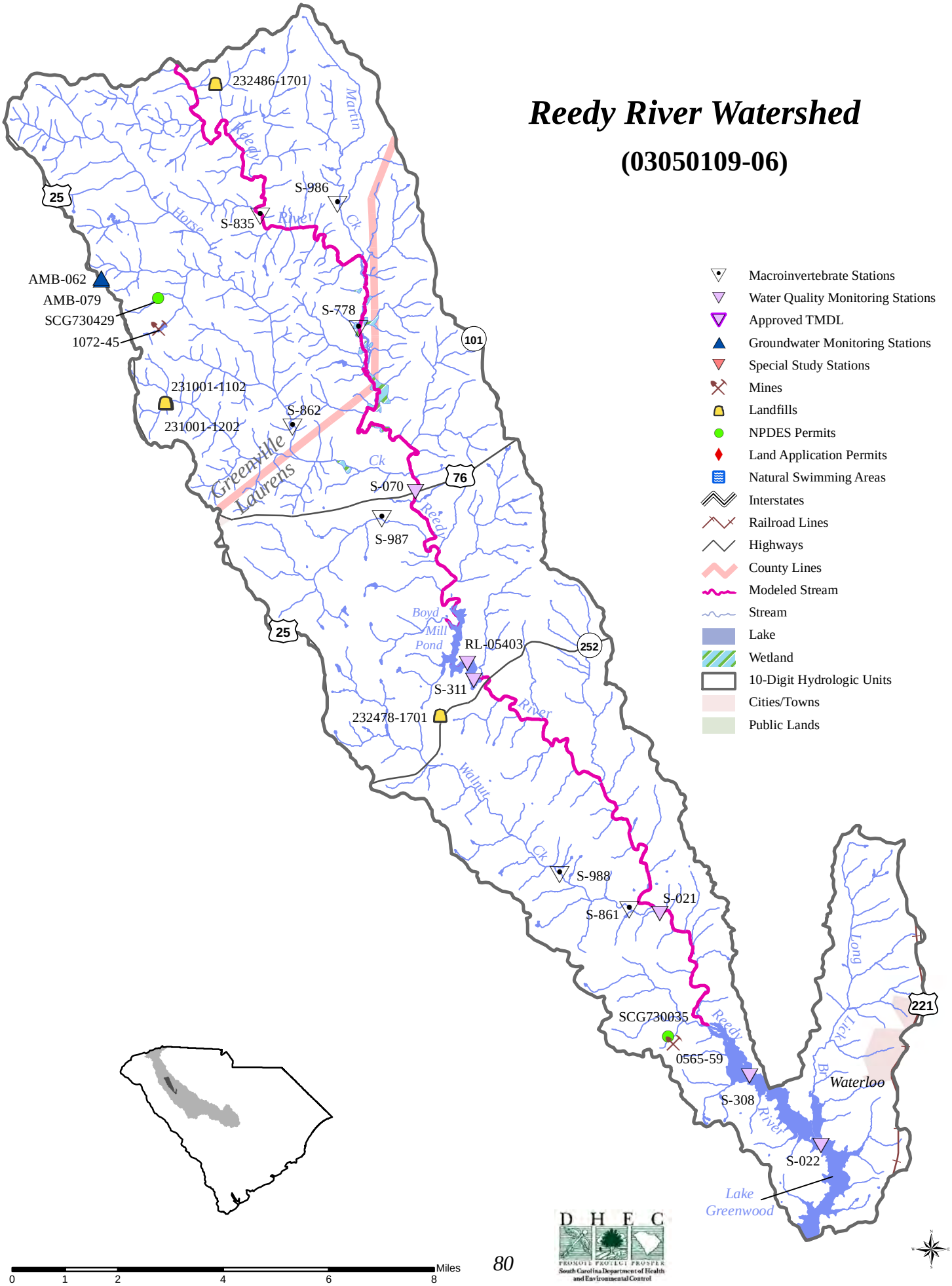
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs are under development by SCDHEC for the **Reedy River** at water quality monitoring sites RL-05403, RL-08047, S-308 and S-311. TMDLs determine the maximum amount of total nitrogen and total phosphorous waterbodies can receive and still meet water quality standards. There are currently two major and three minor NPDES facilities located in the watershed. Much of the watershed has been designated as part of one or more small or large MS4s. Possible sources of nutrients in this watershed include livestock in streams, agricultural runoff, failing septic systems, urban runoff, wastewater treatment facilities and land disturbance. The TMDLs would require reductions in existing phosphorous and nitrogen loading to meet the aquatic life use standard in Boyd Mill Pond and in the Reedy River arm of Lake Greenwood.

TMDLs are also under development by SCDHEC for the **Reedy River** at water quality monitoring sites S-013, S-018, S-067, S-070, S-072, S-073, S-091, S-178, S-264, S-319 and S-323. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There are currently two major and three minor NPDES facilities permitted to discharge fecal coliform bacteria in the watershed. Much of the watershed has been designated as part of one or more small or large MS4s. Possible sources of fecal coliform bacteria in the watershed include SSOs, failing septic systems, agricultural runoff, livestock-in-streams, urban runoff and wildlife. The TMDLs would require a reduction in fecal coliform loading at all sites for this stream to meet the recreational use standard.

The nonpoint source component of the pending Reedy River nutrient TMDLs within the Walnut Creek watershed is currently being implemented using §319 grant funds. Implementation is scheduled to be completed in October 2014. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.


Reedy River Watershed
(03050109-06)
232486-1701
S-986
S-835
AMB-062
AMB-079
SCG730429
1072-45
S-778
231001-1102
231001-1202
S-862
S-070
S-987
RL-05403
S-311
232478-1701
S-988
S-861
S-021
SCG730035
0565-59
S-308
S-022
Lake Greenwood
Waterloo
Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Lake
Wetland
10-Digit Hydrologic Units
Cities/Towns
Public Lands
Miles
0
1
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4
6
8

03050109-07

(Ninety Six Creek)

General Description

Watershed 03050109-07 (formerly 03050109-140) is located in Greenwood County and consists primarily of ***Ninety Six Creek*** and its tributaries. The watershed occupies 91,972 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 55.6% forested land, 24.5% agricultural land, 15.9% urban land, 2.8% forested wetland (swamp), 0.6% water, and 0.6% barren land.

Six Mile Creek and Conally Branch drain into the headwaters of Ninety Six Creek. Henley Creek accepts drainage from Ropers Creek, Marion Creek (Marion Branch), and Tolbert Branch before draining into Ninety Six Creek near the Town of Ninety Six. Kate Fowler Branch enters Ninety Six Creek next followed by Wilson Creek. Rocky Creek (Turner Branch, Sample Branch) flows into Coronaca Creek near the Town of Coronaca, which in turn flows into Wilson Creek (Stockman Branch, Brightmans Creek) near the City of Greenwood. There are a total of 283.4 stream miles and 508.3 acres of lake waters in this watershed.

Surface Water Quality

Station #	Type	Class	Description
RS-03346	RS03/BIO	FW	ROCKY CREEK AT SC 72 BY-PASS AND SC 254 IN GREENWOOD
S-092	W	FW	CORONACA CREEK AT S-24-100, 4 MI NW OF NINETY SIX
S-233	W	FW	WILSON CREEK AT S-24-101
S-235	W/BIO	FW	WILSON CREEK AT S-24-124
S-856	BIO	FW	NINETY SIX CREEK AT SR 42
S-093	INT	FW	NINETY SIX CREEK AT SC 702, 5.2 MILES ESE OF NINETY SIX

Rocky Creek (RS-03346) – Aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions.

Coronaca Creek (S-092) – Aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and turbidity, and significant decreasing trends in dissolved oxygen concentration. There is a significant decreasing trend in pH. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Wilson Creek – There are two SCDHEC monitoring stations along Wilson Creek. At the upstream site ***(S-233)***, aquatic life uses are fully supported and a significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions. At the downstream site ***(S-235)***, aquatic life uses are partially supported based on macroinvertebrate community data. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Ninety Six Creek – There are two SCDHEC monitoring stations along Ninety Six Creek. At the upstream site ***(S-856)***, aquatic life uses are partially supported based on macroinvertebrate community data. At the downstream site ***(S-093)***, aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life chronic criterion. In addition, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand, total phosphorus concentration, and total nitrogen concentration. There is a significant increasing trend in pH. Recreational uses are partially supported due to fecal coliform bacteria excursions.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME***	***NPDES#*** / ***TYPE***
NINETY SIX CREEK	SC0036048
TOWN OF NINETY SIX WWTP	MINOR DOMESTIC
WILSON CREEK	SC0021709
CITY OF GREENWOOD/WILSON CREEK WWTP	MAJOR DOMESTIC
WILSON CREEK	SC0042706
NINETY SIX CPW (PIER 96) WWTP	MINOR DOMESTIC
ROCKY CREEK	SCG250118
GREENWOOD MILLS, INC./HARRIS PLANT	MINOR INDUSTRIAL
BRIGHTMANS CREEK	SCG250127
GREENWOOD MILLS, INC./MATTHEWS PLT	MINOR INDUSTRIAL
ROPERS CREEK	SC0034444
UNITED UTILITIES/HIGHLAND FOREST SD	MINOR DOMESTIC
CORONACA CREEK TRIBUTARY	SCG731100
H. ANDERSON CONSTR./QUARRY ROAD MINE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM / ***MUNICIPALITY*** / ***RESPONSIBLE PARTY*** / ***IMPLEMENTING PARTY***	***NPDES#*** / ***MS4 PHASE*** / ***MS4 SIZE*** / ***COUNTY***
NINETY SIX CREEK	----------
CITY OF GREENWOOD	PHASE II
CITY OF GREENWOOD	SMALL MS4
CITY OF GREENWOOD	

Nonpoint Source Permitted Activities

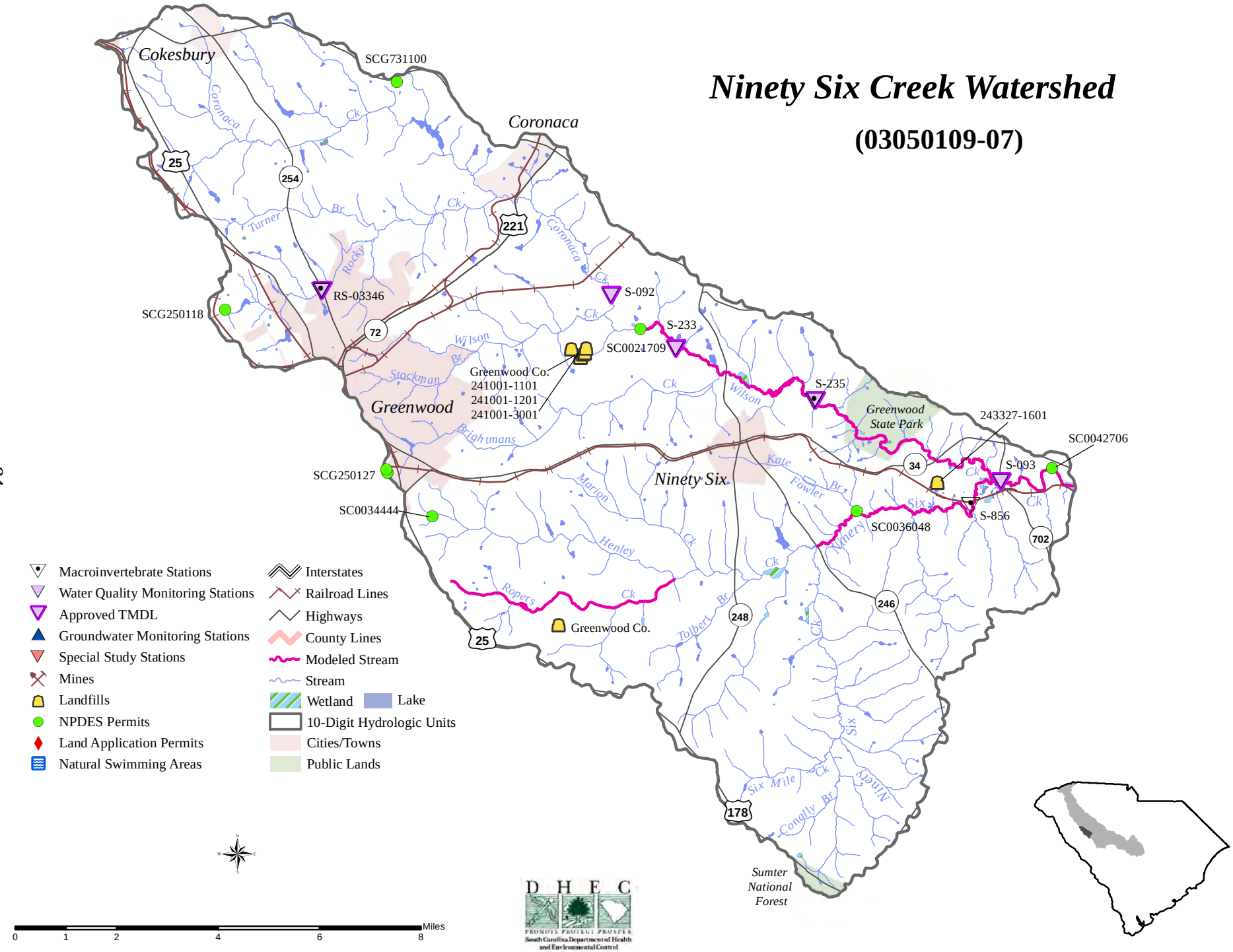
Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
GREENVILLE COUNTY LANDFILL MUNICIPAL	--------- INACTIVE
GREENVILLE COUNTY LANDFILL MUNICIPAL	--------- INACTIVE
GREENVILLE COUNTY SANITARY LANDFILL MUNICIPAL	--------- INACTIVE
GREENVILLE COUNTY SANITARY LANDFILL #1 MUNICIPAL	--------- INACTIVE
GREENVILLE WOOD CHIP/SHRED FACILITY COMPOSTING	241001-3001 INACTIVE
GREENVILLE COUNTY MSW LANDFILL MUNICIPAL	241001-1101 ACTIVE
GREENVILLE COUNTY C&D LANDFILL C&D	241001-1201 ACTIVE
SOUTHERN BRICK LANDFILL INDUSTRIAL	---------- INACTIVE
SOUTHERN BRICK LANDFILL INDUSTRIAL	243327-1601 INACTIVE
GREENVILLE METROPOLITAN COMM. INDUSTRIAL	--------- INACTIVE

Growth Potential

This watershed contains the Town of Ninety Six, portions of the Town of Hodges, the City of Greenwood, and the communities of Cokesbury and Coronaca. There is a moderate potential for industrial growth in the Ninety Six-Greenwood area due to existing infrastructure and continued residential and commercial development.


Ninety Six Creek Watershed
(03050109-07)
Cokesbury
Coronaca
Greenwood
Ninety Six
Greenwood State Park
Sumter National Forest
SCG731100
SCG250118
SCG250127
SC0034444
RS-03346
S-092
S-233
SC0024709
S-235
243327-1601
SC0042706
S-093
S-856
SC0036048
Greenwood Co.
241001-1101
241001-1201
241001-3001
Greenwood Co.
Coronaca Ck
Turner Br
Rocky Ck
Wilson Br
Stockman Ck
Brightmans Ck
Marion Ck
Kate Fowler Br
Ninety Six Ck
Henley Ck
Ropers Ck
Tolbert Br
Six Mile Ck
Conally Br
25
254
221
72
34
702
248
246
178
Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Wetland
Lake
10-Digit Hydrologic Units
Cities/Towns
Public Lands
0
1
2
4
6
8
Miles
D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

03050109-08

(Saluda River/Lake Greenwood)

General Description

Watershed 03050109-08 (formerly 03050109-080, 090 minus Reedy River arm of Lake Greenwood) is located in Anderson, Greenville, Abbeville, Laurens, Greenwood, and Newberry Counties and consists primarily of the ***Saluda River*** and its tributaries from Big Creek to the ***Lake Greenwood*** dam. The watershed occupies 182,629 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 55.6% forested land, 27.8% agricultural land, 8.0% urban land, 5.7% water, 1.7% forested wetland (swamp), and 1.2% barren land.

This section of the Saluda River accepts drainage from Toney Creek, Mountain Creek, Little Creek, and Broad Mouth Creek (Chinquola Mill Creek, Still Branch) before forming Lake Greenwood. Turkey Creek accepts drainage from Goose Creek, Gibson Creek (Gypsy Creek), Dunns Creek, and Little Turkey Creek before forming an arm of Lake Greenwood. Mulberry Creek (Dudley Creek), Camp Branch, Reedy River Watershed, Quarter Creek, and Cane Creek drain into Lake Greenwood forming arms of the lake. Another natural resource in this watershed is Greenwood State Park, which is located on the western shores of Lake Greenwood. Lake Greenwood is used for recreation, power generation, municipal purposes, and water supply. There are a total of 594.3 stream miles and 9,594.5 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
RS-06030	RS06	FW	SALUDA RIVER TRIB. AT RIVER RD. BRIDGE, 7.1 MI SE OF WILLIAMSTON
S-990	BIO	FW	MOUNTAIN CREEK TRIBUTARY AT OAK HILL DR, W. OF US 25
S-864	BIO	FW	MOUNTAIN CREEK AT SR 51
S-289	W	FW	BROAD MOUTH CREEK AT S-04-267
RS-04364	RS04/BIO	FW	BROAD MOUTH CK AT BRIDGE ON S-04-265, 3.5MI NNW OF HONOEA PATH
S-010	W	FW	BROAD MOUTH CREEK AT US 76
S-775	BIO	FW	BROAD MOUTH CREEK AT S-04-81
S-304	INT	FW	BROAD MOUTH CREEK AT S-01-111
S-125	INT	FW	SALUDA RIVER AT US 25 BYPASS, 1.5 MILES ESE OF WARE SHOALS
S-989	BIO	FW	GIBSON CREEK AT BOLT ROAD
S-858	BIO	FW	TURKEY CREEK AT SR 96
S-024	INT	FW	LAKE GREENWOOD HEADWATERS, JUST UPSTREAM OF S-30-33
RL-02311	RL02	FW	LAKE GREENWOOD, 1.0 MI NW OF SEABOARD RR CROSSING
S-131	W	FW	LAKE GREENWOOD AT US 221, 7.6 MILES NNW OF NINETY SIX
S-097	W	FW	LAKE GREENWOOD, CANE CK ARM AT SC 72, 3.1 MILES SW OF CROSS HILL
RL-04387	RL04	FW	LAKE GREENWOOD, 2.2 MI NW OF LAKE GREENWOOD STATE PARK
S-303	INT	FW	LAKE GREENWOOD 200 FEET UPSTREAM OF DAM

Saluda River Tributary (RS-06030) – Aquatic life uses are fully supported, but recreational uses are not supported due to fecal coliform bacteria excursions.

Mountain Creek Tributary – Aquatic life uses are partially supported based on macroinvertebrate community data.

Mountain Creek – Aquatic life uses are fully supported based on macroinvertebrate community data.

Broad Mouth Creek – There are five SCDHEC monitoring stations along Broadmouth Creek. At the furthest upstream site ***(S-289)***, aquatic life uses are fully supported. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration, and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration. Moving downstream ***(RS-04364)***, aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions. Further downstream ***(S-010)***, aquatic life uses are fully supported. There is a significant increasing trend in pH. Significant decreasing trends in total phosphorus concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. At the next site downstream ***(S-775)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the furthest downstream site ***(S-304)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Saluda River (S-125) - Aquatic life and recreational uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration and decreasing trends in dissolved oxygen concentration. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter.

Gibson Creek (S-989) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Turkey Creek (S-858) – Aquatic life uses are partially supported based on macroinvertebrate community data.

Lake Greenwood - Lake Greenwood is an 11,400-acre impoundment on the Saluda River, with a maximum depth of approximately 68.9 feet and an average depth of approximately 23.0 feet. The lake's watershed comprises 779.8 square miles. There are five SCDHEC monitoring stations along Lake Greenwood and recreational uses are fully supported at all sites. At the furthest uplake site ***(S-024)***, aquatic life uses are partially supported due to pH excursions. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Moving downlake ***(RL-02311)***, aquatic life uses are again partially supported due to pH excursions. At the midlake site ***(S-131)***,

aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and decreasing trends in dissolved oxygen concentration. A significant decreasing trend in fecal coliform bacteria concentration at this site suggests improving conditions for this parameter. Further downlake ***(RL-04387)***, aquatic life uses are fully supported. At the furthest downlake site ***(S-303)***, aquatic life uses are partially supported due to occurrences of copper in excess of the aquatic life chronic criterion. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter at this site. *Fish tissue analyses on species caught from Lake Greenwood indicate no advisories or restrictions on consumption of fish from these waters.*

Cane Creek Arm of Lake Greenwood (S-097) – Aquatic life and recreational uses are fully supported; however, there are significant increasing trends in total phosphorus concentration and decreasing trends in dissolved oxygen concentration. *Fish tissue analyses on species caught from Lake Greenwood indicate no advisories or restrictions on consumption of fish from these waters.*

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
LAURENS BAPTIST CHURCH	30-N03
LAKE GREENWOOD	ACTIVE
CAMP FELLOWSHIP	30-N04
LAKE GREENWOOD	ACTIVE

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-068	GB	PIEDMONT BEDROCK	CHAPPELS

All water samples collected from ambient monitoring well ***AMB-068*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM	***NPDES#***
FACILITY NAME	***TYPE***
SALUDA RIVER	SC0020214
TOWN OF WARE SHOALS/DAIRY STREET	MAJOR DOMESTIC
SALUDA RIVER	SC0045896
CITY OF BELTON/DUCWORTH	MAJOR DOMESTIC
SALUDA RIVER	SC0046841
TOWN OF WILLIAMSTON/BIG CREEK EAST WWTP	MAJOR DOMESTIC

SALUDA RIVER	SCG730157
COOPER SAND & GRAVEL/SALUDA R. UPPER PL	MINOR INDUSTRIAL
SALUDA RIVER TRIBUTARY	SCG730109
WR GRACE & CO./EZELL MINE	MINOR INDUSTRIAL
SALUDA RIVER TRIBUTARY	SC0040827
BELTON HONEA PATH WATER AUTHORITY	MINOR DOMESTIC
LAKE GREENWOOD	SCG641009
WR WISE WTP	MINOR INDUSTRIAL
CAMP BRANCH	SCG730051
VULCAN CONSTR. MAT. CO./GREENWOOD QUARRY	MINOR INDUSTRIAL
CAMP BRANCH	SCG730252
VULCAN CONSTR. MAT. CO./STONEY PIT	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SCG340019
TRANSMONTAIGNE/BELTON/PIEDMONT	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SCG340013
BP PRODUCTS IN AMERICA/BELTON TERM.	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SCG340014
MARATHON PETROLEUM/BELTON	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SCG340020
COLONIAL PIPELINE/BELTON	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SC0047520
INGERSOLL-RAND CO.	MINOR INDUSTRIAL
BROAD MOUTH CREEK	SC0000698
BELTON INDUSTRIES INC.	MINOR INDUSTRIAL
LITTLE TURKEY CREEK	SC0048356
CLENDENIN LUMBER CO.	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	***COUNTY***
LAKE GREENWOOD	SCS230001
----------	PHASE I
GREENVILLE COUNTY	MEDIUM MS4
GREENVILLE COUNTY	
LAKE GREENWOOD	SCR030703
CITY OF BELTON	PHASE II
CITY OF BELTON	SMALL MS4
ANDERSON COUNTY	

LAKE GREENWOOD	SCR030702
UNINCORPORATED AREAS	PHASE II
ANDERSON COUNTY	SMALL MS4
ANDERSON COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
MONSANTO CO.	-------
INDUSTRIAL	INACTIVE
RIEGEL TEXTILE CORP.	----------
INDUSTRIAL	INACTIVE
BHC TRUCKING LCD LANDFILL	242783-1701
C&D	ACTIVE
BELTON INDUSTRIES, INC. C&D LANDFILL	042477-1301
C&D	INACTIVE
CITY OF BELTON LCD & YT LANDFILL	041005-1701
C&D	ACTIVE
THOMAS BUZHARDT PROPERTY	----------
INDUSTRIAL	INACTIVE
RIDGE ROAD DUMP	----------
DOMESTIC	INACTIVE
MICHELIN AMERICA	303311-1601
INDUSTRIAL	ACTIVE
WARE SHOALS DYEING & PRINTING	----------
INDUSTRIAL	INACTIVE
HONEA PATH CITY DUMP	----------
MUNICIPAL	INACTIVE
HONEA PATH YT&D COMPOSTING	041002-3001
COMPOSTING	ACTIVE

Mining Activities

MINING COMPANY	***PERMIT #***
MINE NAME	***MINERAL***
COOPER SAND & GRAVEL COMPANY, INC.	0242-07
SALUDA RIVER MINE	SAND
THOMASON CONSTRUCTION	0944-01
TAYLOR MINE	SAND

WR GRACE & CO. EZELL MINE	0987-59 VERMICULITE
WILSON BROTHERS SAND COMPANY, INC. BOLING MINE	0166-47 SAND
HANSON AGGREGATES SE, INC. WILSON QUARRY	1010-47 GRANITE
TARMAC MID-ATLANTIC, INC. GREENWOOD QUARRY	0134-47 GRANITE

Water Quantity

WATER USER ***STREAM***	***REGULATED CAPACITY (MGD)*** ***PUMPING CAPACITY (MGD)***
GREENWOOD CPW LAKE GREENWOOD	30.0 39.0
BELTON-HONEA PATH WATER AUTHORITY SALUDA RIVER	11.95 8.2

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Town of Ware Shoals and portions of the Towns of Honea Path, Donalds, Hodges, Waterloo, and Cross Hill, the City of Belton, and the Coronaca community. Donalds, Hodges, and Ware Shoals are experiencing some growth due to their close proximity to the greater Greenwood area. US 178 (US 25) and rail lines connect the towns to the City of Greenwood, and the potential exists for some industrial growth due to the existing infrastructure. Infrastructure development in the Ware Shoals-Hodges area has encouraged residential and commercial growth. Lake Greenwood has experienced significant growth; however, the growth is expected to continue at a slower pace in the future. US 221 and a major rail line cross this watershed. The major sewer interceptor connects Honea Path with Ware Shoals. The corridor that runs along US 76 from Honea Path to Belton and on to Williamston will continue to be a growth area.

Watershed Protection and Restoration Strategies

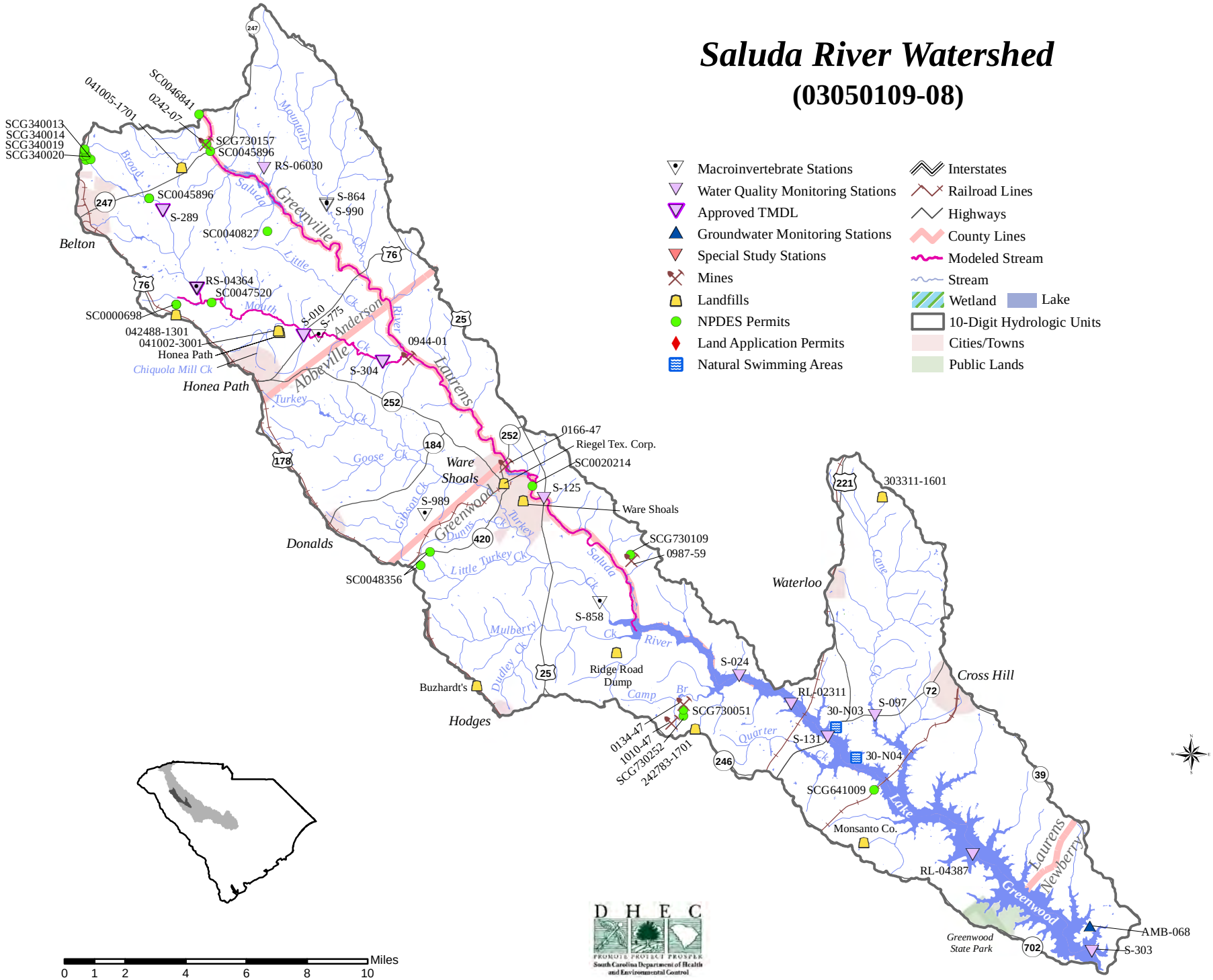
Total Maximum Daily Loads (TMDLs)

TMDLs were developed by SCDHEC and approved by EPA for **Broad Mouth Creek** at water quality monitoring sites S-010, S-289, and S-304. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There was one permitted wastewater treatment facility located on Broad Mouth Creek. Part of the watershed has been designated as a small MS4. Probable sources of fecal coliform bacteria that were identified in the watershed are failing septic systems, leaking sewers, sanitary sewer overflows, agricultural runoff, cattle-in-streams, and urban runoff. The TMDLs require reductions of 49% to 75% in fecal coliform loading for this stream to meet the recreational use standard.

Protection Strategies

Although SCDHEC's long-term monitoring has not indicated that the Saluda River arm of Lake Greenwood is violating the phosphorus standard, SCDHEC took a proactive approach to avoid potential for nutrient-related problems, such as algal blooms, do not occur. In May 2011, SCDHEC reissued the 12 domestic NPDES permits in the Saluda River watershed with new requirements for phosphorus limits. As part of the permitting process, the utilities entered into a trading agreement to collectively determine how much phosphorous each utility would discharge. Each permit is linked to that agreement and signed by DHEC and the utilities.

Saluda River Watershed
(03050109-08)



03050109-09

(Little River)

General Description

Watershed 03050109-09 (formerly 03050109-160) is located in Laurens and Newberry Counties and consists primarily of the ***Little River*** and its tributaries. The watershed occupies 147,150 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 59.7% forested land, 27.6% agricultural land, 8.2% urban land, 3.0% forested wetland (swamp), 1.1% barren land, and 0.4% water.

The Little River accepts drainage from Reedy Fork in the City of Laurens and Burnt Mill Creek (Scout Branch) enters the river further downstream. North Creek, Beaverdam Creek, and Simmons Creek drain into the Little River next followed by Garrison Creek (Quaker Creek), Sandy Run Creek (Reeder Branch), Mechanic Creek, Mudlick Creek (Campbell Creek, North Campbell Creek, Mill Creek, Watkins Creek, Mills Creek, Pages Creek), Davenport Branch, Stephens Creek, and Turners Branch. There are a total of 501.6 stream miles and 459.9 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-034	W	FW	LITTLE RIVER AT U.S. BUS 76, IN LAURENS ABOVE WWTP
S-297	W	FW	LITTLE RIVER AT S.C. ROUTE 127
S-135	W	FW	NORTH CREEK AT U.S. 76, 2.8 MILES W OF CLINTON
RS-05400	RS05	FW	BEAVERDAM CREEK AT S-30-341, 7.0 MI S OF LAURENS
S-099	SPRP	FW	LITTLE RIVER AT S-36-22, 8.3 MILES NW OF SILVERSTREET
S-100	BIO	FW	LITTLE RIVER AT SR 48
RS-04526	RS04/BIO	FW	MUDLICK CREEK BETW SC 56 & S-36-65, 9.0 MI NW OF SILVERSTREET

Little River – There are four SCDHEC monitoring stations along the Little River. At the furthest upstream site ***(S-034)***, aquatic life and recreational uses are fully supported, and a significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Moving downstream ***(S-297)***, aquatic life uses are again fully supported, but recreational uses are partially supported due to fecal coliform bacteria excursions. At the next downstream site ***(S-099)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are partially supported due to fecal coliform bacteria excursions. At the furthest downstream site ***(S-100)***, aquatic life uses are fully supported based on macroinvertebrate community data.

North Creek (S-135) – Aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are not supported due to fecal coliform bacteria excursions.

Beaverdam Creek (RS-05400) – Aquatic life uses are fully supported. Recreational uses are not supported due to fecal coliform bacteria excursions.

Mudlick Creek (RS-04526) – Aquatic life uses are fully supported based on macroinvertebrate community data. Recreational uses are partially supported due to fecal coliform bacteria excursions.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME***	***NPDES#*** / ***TYPE***
LITTLE RIVER COMM. OF PUBLIC WORKS/LAURENS	SC0020702 MAJOR DOMESTIC
LITTLE RIVER WR GRACE & CO./HUDGENS MINE	SCG730030 MINOR INDUSTRIAL
LITTLE RIVER EAGLE CONSTRUCTION/ROBERT PARKER MINE	SCG731101 MINOR INDUSTRIAL
DITCH TO LITTLE RIVER INTERNATIONAL PAPER/SILVERSTREET	SC0022730 MINOR INDUSTRIAL
REEDY FORK CITY OF LAURENS WTP	SCG645006 MINOR DOMESTIC
NORTH CREEK INGERSOLL RAND CO./GW RECOVERY SYS.	SC0048534 MINOR INDUSTRIAL
NORTH CAMPBELL CREEK CAROLINA VERMICULITE/HANNA MINE	SCG730067 MINOR INDUSTRIAL
NORTH CAMPBELL CREEK CAROLINA VERMICULITE/VERNES MINE	SCG730149 MINOR INDUSTRIAL
BURNT MILL CREEK TRIBUTARY CAROLINA VERMICULITE/PATTERSON MINE	SCG730148 MINOR INDUSTRIAL
LITTLE RIVER TRIBUTARY MILLIKEN & CO./GILLILAND PLANT	SCG250274 MINOR INDUSTRIAL

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME / ***FACILITY TYPE***	***PERMIT #*** / ***STATUS***
TECHNICAL CERAMIC PRODUCTS INDUSTRIAL	--------- INACTIVE

LAURENS COUNTY SANITARY LANDFILL MUNICIPAL	301001-1101 INACTIVE
LAURENS COUNTY SANITARY LANDFILL MSW	---------- INACTIVE
LAURENS COUNTY C&D LANDFILL C&D	301001-1201 ACTIVE
LAURENS COUNTY COMPOSTING FACILITY COMPOSTING	301001-3001 ACTIVE
CITY OF LAURENS DUMP #1 MUNICIPAL	---------- INACTIVE
CITY OF LAURENS DUMP #2 MUNICIPAL	---------- INACTIVE
HR GARRETT/MICHAELA ST LCD & YT LANDFILL C&D	302458-1701 INACTIVE
HR GARRETT/LISBON RD LCD & YT LANDFILL C&D	302458-1702 INACTIVE
HR GARRETT/LISBON RD LCD & YT LANDFILL #2 C&D	302458-1703 ACTIVE
HR GARRETT/HARRIS ROAD LCD & YT LANDFILL C&D	302458-1704 INACTIVE

Land Applications

LAND APPLICATION FACILITY NAME	***PERMIT # TYPE***
SPRAYFIELD ISE NEWBERRY, INC.	ND0078158 INDUSTRIAL

Mining Activities

MINING COMPANY MINE NAME	***PERMIT # MINERAL***
WR GRACE & CO. HUDGENS MINE	0749-59 VERMICULITE
WR GRACE & CO. LEONARD MINE	0835-59 VERMICULITE
WR GRACE & CO. CUNNINGHAM	1226-59 VERMICULITE
CAROLINA VERMICULITE COMPANY, INC. KENNETH HANNA MINE	0642-59 VERMICULITE
CAROLINA VERMICULITE COMPANY, INC. PATTERSON MINE	1130-59 VERMICULITE

CAROLINA VERMICULITE COMPANY, INC. VERENES MINE	1111-59 VERMICULITE
SOUTHERN BRICK COMPANY SPIGNER MINE	0828-71 CLAY

Water Quantity

WATER USER ***STREAM***	***REGULATED CAPACITY (MGD)*** ***PUMPING CAPACITY (MGD)***
CITY OF LAURENS CPW REEDY FORK	1.5 3.5

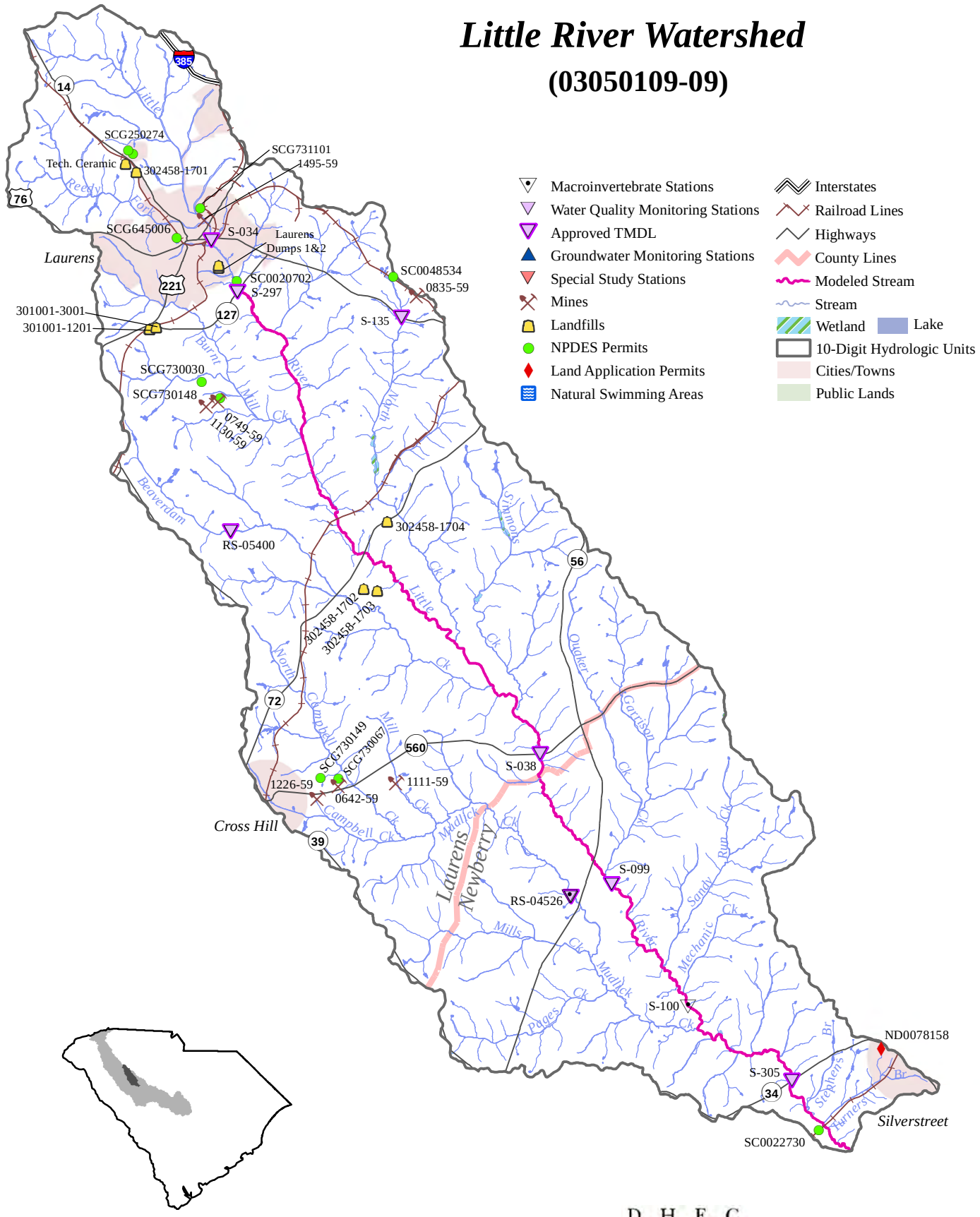
Growth Potential

This watershed contains most of the City of Laurens and portions of the communities of Watts Mill and Mountville, and the Towns of Crosshill and Silverstreet. The City of Laurens is located in the northern portion of this watershed and has a high potential for growth. Factors that influence this growth include two major rail lines, US 221, US 76, and I-385. The Laurens County Industrial Park is a growth area in the predominately rural southern portion of the watershed. A large plastics plant has built in the watershed, near Clinton off SC 72, and should add to the industrial growth in the area. There currently is not much growth potential for the area around Silverstreet in Newberry County.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for the **Little River** and its tributary **North Creek** at water quality monitoring sites S-034, S-038, S-099, S-135, S-297, and S-305. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There was one NPDES facilities permitted to discharge fecal coliform bacteria in the Little River watershed. Much of the watershed has been designated as part of one or more small MS4s. Possible sources of fecal coliform bacteria in this watershed are failing septic systems, agricultural runoff, cattle-in-streams, and urban runoff. The TMDLs require reductions of 39% to 78% in fecal coliform loading for these streams to meet the recreational use standard.


Little River Watershed
(03050109-09)
Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Wetland
Lake
10-Digit Hydrologic Units
Cities/Towns
Public Lands
SCG250274
Tech. Ceramic
302458-1701
SCG731101
1495-59
SCG645006
S-034
Laurens
Dumps 1&2
Laurens
SC0020702
S-297
SC0048534
0835-59
S-135
301001-3001
301001-1201
SCG730030
SCG730148
0749-59
1130-59
RS-05400
302458-1704
302458-1702
302458-1703
SCG730149
SCG730067
1226-59
0642-59
1111-59
Cross Hill
S-038
S-099
RS-04526
S-100
ND0078158
S-305
SC0022730
Silverstreet
Miles
0 1 2 4 6 8
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D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

03050109-10

(Clouds Creek/Lake Murray)

General Description

Watershed 03050109-10 (formerly 03050109-180 plus Clouds Creek arm of Lake Murray) is located in Saluda and Lexington Counties and consists primarily of ***Clouds Creek*** and its tributaries from its origin to ***Lake Murray***. The watershed occupies 71,940 acres of the Piedmont and Upper Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 57.2% forested land, 29.2% agricultural land, 7.4% urban land, 3.5% forested wetland (swamp), 1.5% barren land, and 1.2% water.

The Clouds Creek watershed originates near the Town of Ridge Spring and drains into the Little Saluda River. Clouds Creek is joined by Peters Creek and Indian Creek before flowing through Asbill Pond. Downstream of the pond, Clouds Creek accepts the drainage of Jacobs Branch, Moores Creek (Dye Creek), Harris Branch, Warren Branch, Mack Branch, Flat Rock Branch, and Long Branch, West Creek (Bates Branch, Gin Branch, Lick Creek), Clapboard Branch, and Beaverdam Creek. There are a total of 270.5 stream miles and 1,282.5 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-255	W	FW	CLOUDS CREEK AT S-41-26, 4 MILES NW OF BATESBURG
RS-05398	RS05/BIO	FW	WEST CREEK AT S-41-105, 12.4 MI ESE OF SALUDA
S-324	INT	FW	CLOUDS CREEK AT US 378

Clouds Creek - There are two SCDHEC monitoring stations along Clouds Creek. At the upstream site ***(S-255)***, aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. At the downstream site ***(S-324)***, aquatic life uses are fully supported and a significant decreasing trend in five-day biochemical oxygen demand suggests improving trends for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

West Creek (RS-05398) – Aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions.

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-113	GB	PIEDMONT BEDROCK	AMICK POULTRY

All water samples collected from ambient monitoring well ***AMB-113*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME*	*NPDES#* *TYPE*
GIN BRANCH COLUMBIA FARMS HATCHERY FEED	SCG250064 MINOR INDUSTRIAL

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
TOWN OF BATESBURG-LEESVILLE LC&D C&D	321003-1701 ACTIVE
GREEN MAN TECH. OF SC, INC. WTP	322475-5202 INACTIVE
J.V. WASTE TIRE WTP	322475-5202 INACTIVE

Land Applications

LAND APPLICATION *FACILITY NAME*	*PERMIT #* *TYPE*
SLUDGE APPLICATION SITE CAROLINA BY-PRODUCTS/WARD DIV.	ND0076945 INDUSTRIAL

Growth Potential

Lexington County as a whole has experienced a rapid rate of growth over the last decade (2000-2010) with the majority of it occurring in the unincorporated portions of the County, some of which has impacted the area around Batesburg-Leesville. Batesburg-Leesville does own and operate their own water and sewer systems and is currently in discussions with neighboring jurisdictions to partner on developing a regional water supply from Lake Murray. This could have an impact on growth and development trends in coming years. There is a low potential for growth in the other areas of the watershed around Ridge Spring and Monetta. The majority of these areas still do not have water or sewer available.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

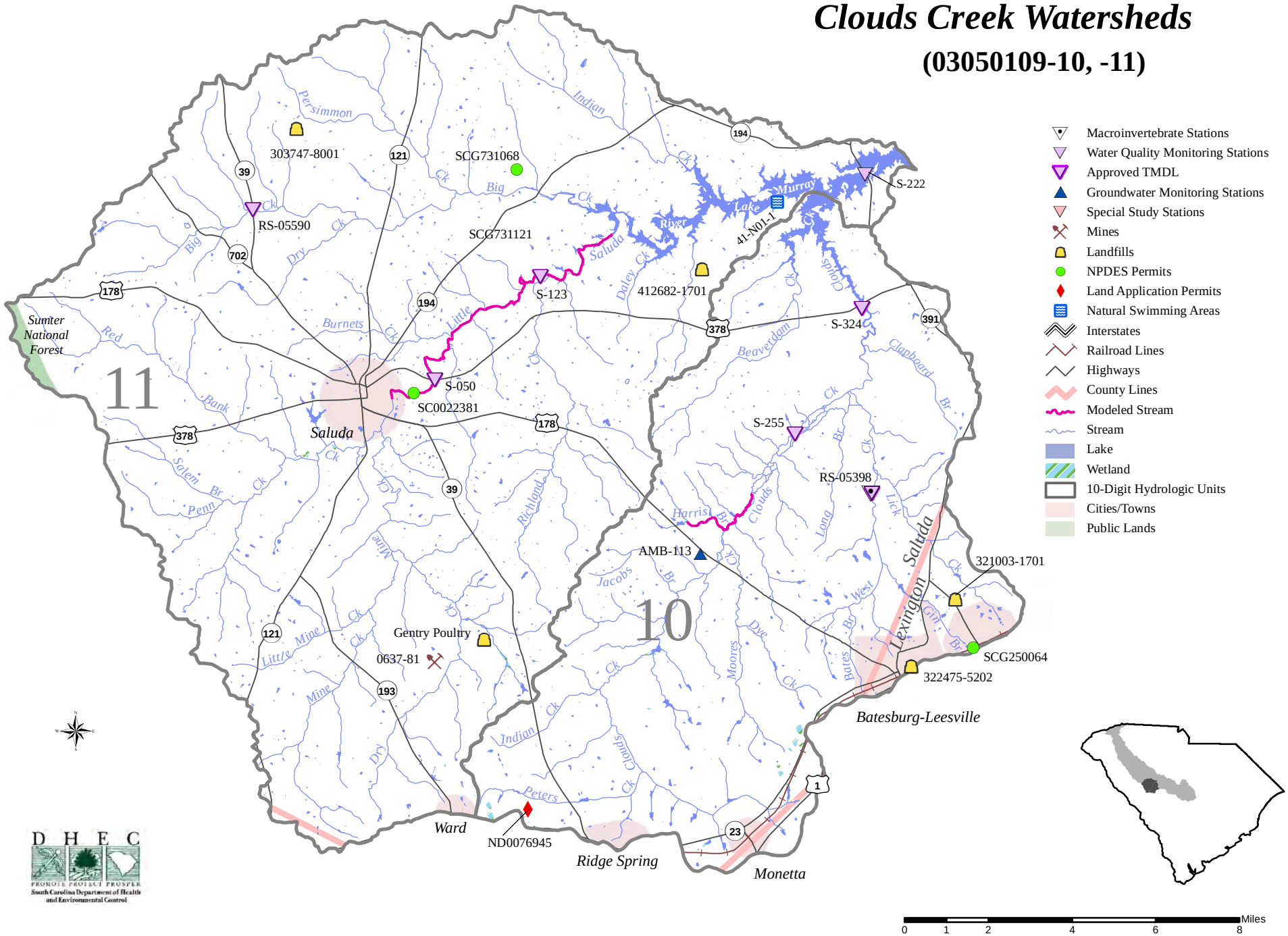
TMDLs were developed for SCDHEC and approved by EPA for **Clouds Creek** at water quality monitoring sites S-255 and S-324. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There is no active NPDES facility permitted to discharge fecal coliform bacteria in this watershed. This watershed has no designated or potential MS4s. Possible sources of fecal coliform bacteria in this watershed are

failing septic systems, improper land application of manure, cattle or other livestock watering in the creeks, birds and wildlife. The TMDLs require reductions of 33% and 37% in fecal coliform loading for this stream to meet the recreational use standard.

The nonpoint source component of the Clouds Creek TMDL is currently being implemented using §319 grant funds. Implementation is scheduled to be completed in December 2012. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.

Little Saluda River/ Clouds Creek Watersheds

(03050109-10, -11)



03050109-11

(Little Saluda River/Lake Murray)

General Description

Watershed 03050109-11 (formerly 03050109-170 minus the Clouds Creek arm of the lake) is located in Saluda County and consists primarily of the ***Little Saluda River*** and its tributaries from its origin to Lake Murray. The watershed occupies 143,678 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 50.8% forested land, 37.7% agricultural land, 7.1% urban land, 1.6% forested wetland (swamp), 1.5% water, and 1.3% barren land.

The Little Saluda River is formed by the confluence of Mine Creek (Little Mine Creek, Dry Creek) and Red Bank Creek (Penn Creek, Salem Branch) and flows through the Saluda Reservoir near the Town of Saluda. Further downstream, the Little Saluda River is joined by Canebrake Branch, Burnets Creek, Richland Creek (Poplar Branch, Corley Branch), and Big Creek (Dry Creek, Shiloh Branch, Persimmon Creek, Watermelon Branch). Indian Creek and Dailey Creek flow into the Little Saluda River arm of Lake Murray forming small coves. There are a total of 527.1 stream miles and 3,217.0 acres of lake waters in this watershed, all classified FW. The western most corner of the watershed is within the Sumter National Forest.

Surface Water Quality

Station #	Type	Class	Description
S-050	W	FW	LITTLE SALUDA RIVER AT US 378, E OF SALUDA
S-123	INT	FW	LITTLE SALUDA RIVER AT S-41-39, 5.2 MILES NE OF SALUDA
RS-05590	RS05	FW	BIG CREEK AT SC 39, 5.1 MI NW OF SALUDA
S-222	W	FW	LAKE MURRAY, LITTLE SALUDA RIVER ARM AT SC 391

Little Saluda River – There are two SCDHEC monitoring stations along the Little Saluda River. At the upstream site ***(S-050)***, aquatic life uses are not supported due to dissolved oxygen excursions. Recreational uses are fully supported. At the downstream site ***(S-123)***, aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. In addition, there is a significant increasing trend in five-day biochemical oxygen demand. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Big Creek (RS-05590) – Aquatic life uses are fully supported, but recreational uses are not supported due to fecal coliform bacteria excursions.

Little Saluda River Arm of Lake Murray (S-222) - Aquatic life uses are not supported due to pH and total phosphorus excursions. There is a significant decreasing trend in pH. Significant

decreasing trends in total phosphorus concentration and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Natural Swimming Areas

FACILITY NAME *RECEIVING STREAM*	*PERMIT #* *STATUS*
CAMP BARSTOW LITTLE SALUDA RIVER ARM OF LAKE MURRAY	41-N01 ACTIVE

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME*	*NPDES#* *TYPE*
LITTLE SALUDA RIVER TOWN OF SALUDA	SC0022381 MINOR DOMESTIC
BIG CREEK TRIBUTARY FD RILEY & SONS/HARMON ROAD MINE	SCG731068 MINOR INDUSTRIAL
BIG CREEK TRIBUTARY CHEROKEE, INC./DENNY HWY PIT MINE	SCG731121 MINOR INDUSTRIAL

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
GENTRY POULTRY CO. INDUSTRIAL	-------- INACTIVE
GOFF LCD&YT LANDFILL C&D	412682-1701 ACTIVE
NORBORD ASH LA	303747-8001 ACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
BOWERS LEASING CO. HUGHES MINE	0637-81 SAND

Growth Potential

Growth for the Town of Saluda, found in the center of this watershed, is limited due to water and sewer constraints. A portion of the Town of Ward also resides in the watershed. Saluda County connected into the Edgefield County Water and Sewer Authority's Regional Sewer Collection System, which should provide more potential for future growth. US Hwys 178 and 378 run through the watershed, and together with existing industry may encourage growth in this area.

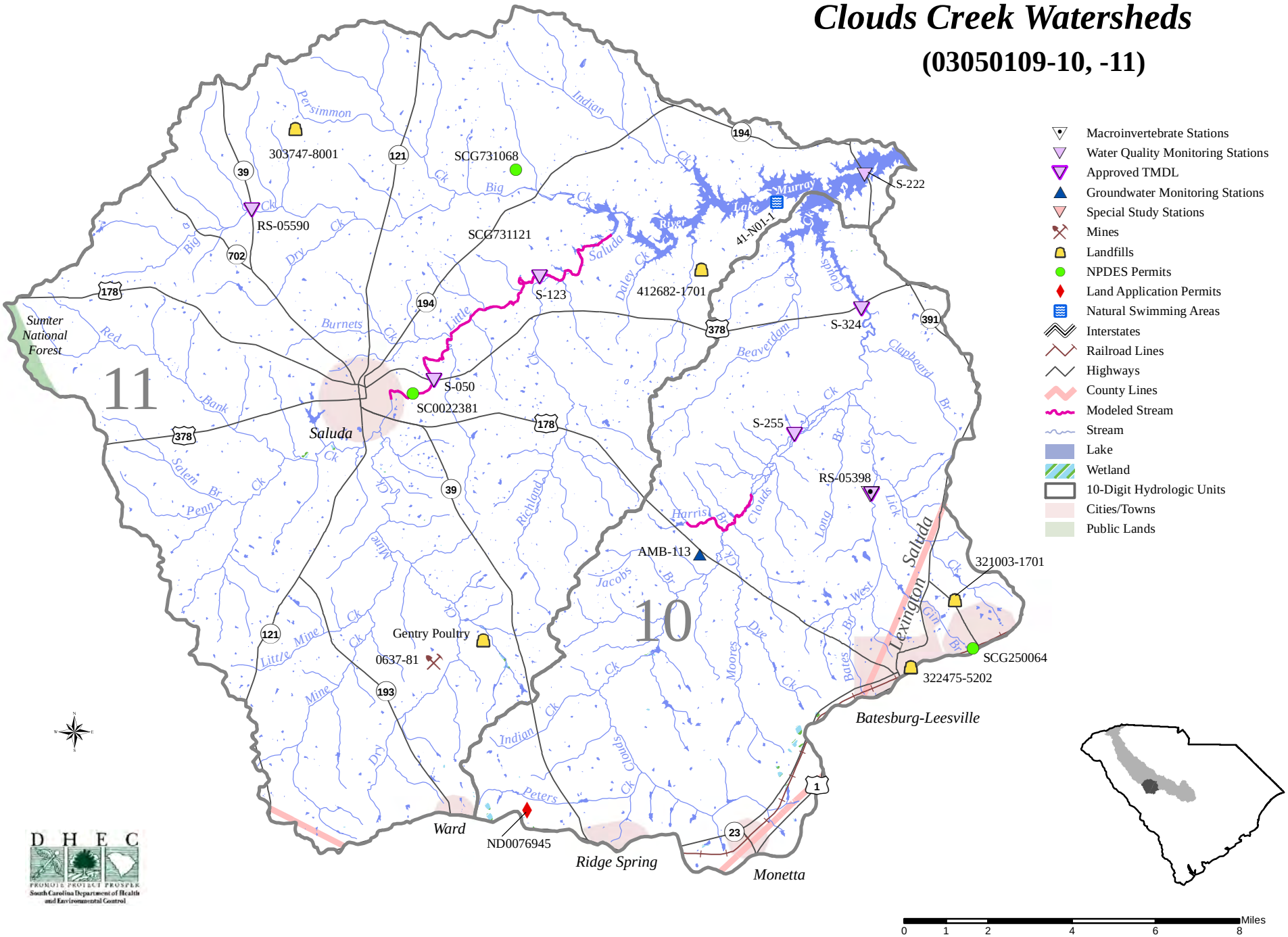
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for the **Little Saluda River** at water quality monitoring sites S-050 and S-123. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. The Town of Saluda operates a wastewater treatment facility in the Little Saluda River watershed. This watershed has no designated or potential MS4s. Possible sources of fecal coliform bacteria in this watershed are failing septic systems, cattle watering in the creeks, birds, and wildlife. The TMDLs require reductions of 65% and 68% in fecal coliform loading for this stream to meet the recreational use standard. The nonpoint source component of the Little Saluda River TMDL is currently being implemented using §319 grant funds. Implementation is scheduled to be completed in December 2012. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.

Little Saluda River/ Clouds Creek Watersheds

(03050109-10, -11)



03050109-12

(Saluda River/Lake Murray)

General Description

Watershed 03050109-12 (formerly 03050109-150) is located in Laurens, Newberry, Saluda, and Greenwood Counties and consists primarily of the ***Saluda River*** and its tributaries from the Lake Greenwood dam to the ***Lake Murray*** headwaters. The watershed occupies 182,561 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 54.3% forested land, 31.3% agricultural land, 8.5% urban land, 2.6% forested wetland (swamp), 2.0% water, and 1.3% barren land.

This section of the Saluda River flows out of Lake Greenwood and is joined by Halfway Swamp (Thompsons Creek) and Sharps Branch near the Town of Chappells. Further downstream, Terrapin Creek and Mill Creek enter the river, followed by the Little River watershed, Rocky Branch, and Tosity Creek. Beaverdam Creek (Welch Creek) flows past the Town of Silverstreet and drains into the Saluda River arm of Lake Murray. The Bush River originates near the City of Clinton where it accepts drainage from Shell Creek (Sand Creek). Further downstream, near the City of Newberry, Rocky Creek, Big Beaverdam Creek (Reedy Creek), and Scott Creek flow into the Bush River. The Bush River then accepts drainage from Timothy Creek (Kinards Creek, Dewalt Creek) near the Town of Prosperity and drains into the Saluda River arm of the lake. Big Creek enters the lake just downstream of the confluence of the Saluda and Bush Rivers. There are a total of 668.9 stream miles and 3,797.0 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-295	W	FW	SALUDA RIVER AT S.C. ROUTE 39
S-047	INT	FW	SALUDA RIVER AT SC 121
S-852	BIO	FW	BEAVERDAM CREEK AT SR 83
S-310	INT	FW	LAKE MURRAY, SALUDA RIVER ARM, 3.8 KM UPSTREAM OF SC 391
S-042	W	FW	BUSH RIVER AT SC 560 S OF JOANNA
S-046	W	FW	BUSH RIVER AT SC ROUTE 34
S-044	W	FW	BUSH RIVER TRIBUTARY AT SC 34, SW OF NEWBERRY
S-851	BIO	FW	BUSH RIVER AT SR 244
S-102	W	FW	BUSH RIVER AT S-36-41, 8.5 MILES S OF NEWBERRY
S-309	SUMM	FW	LAKE MURRAY, BUSH RIVER ARM, 4.6 KM UPSTREAM OF SC 391
S-223	W	FW	LAKE MURRAY, SALUDA RIVER ARM, AT SC 391 (BLACKS BRIDGE)

Saluda River - There are two SCDHEC monitoring stations along this section of the Saluda River. At the upstream site ***(S-295)***, aquatic life and recreational uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. At the downstream site ***(S-047)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Beaverdam Creek (S-852) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Saluda River Arm of Lake Murray – There are two SCDHEC monitoring stations along the Saluda River Arm of Lake Murray and recreational uses are fully supported at both sites. At the upstream site ***(S-310)***, aquatic life uses are partially supported due to pH excursions. In addition, there is a significant decreasing trend in dissolved oxygen concentration. There is a significant decreasing trend in pH. At the downstream site ***(S-223)***, aquatic life uses are fully supported, and a significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

Bush River - There are four SCDHEC monitoring stations along the Bush River. At the furthest upstream site ***(S-042)***, aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the next site downstream ***(S-046)***, aquatic life uses are fully supported, but recreational uses are not supported due to fecal coliform bacteria excursions. Further downstream ***(S-851)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the furthest upstream site ***(S-102)***, aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. Recreational uses are not supported due to fecal coliform bacteria excursions.

Scott Creek (S-044) – Aquatic life uses are partially supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. Recreational uses are not supported; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Bush River Arm of Lake Murray (S-309) – Aquatic life uses are not supported due to total phosphorus and chlorophyll excursions. In addition, there is a significant decreasing trend in dissolved oxygen concentration. There is a significant decreasing trend in pH. Recreational uses are fully supported.

A fish consumption advisory has been issued by SCDHEC for mercury and includes the Saluda River within this watershed (see advisory p.40).

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME*	*NPDES#* *TYPE*
BUSH RIVER CITY OF CLINTON/GARY ST WWTP	SCG645004 MINOR DOMESTIC
BUSH RIVER CITY OF NEWBERRY/BUSH RIVER WWTP	SC0024490 MAJOR DOMESTIC
BUSH RIVER LAURENS COUNTY W&S/CLINTON-JOANNA	SC0037974 MAJOR DOMESTIC
SALUDA RIVER TRIBUTARY CITY OF NEWBERRY WTP	SCG645034 MINOR DOMESTIC
TERRAPIN CREEK HANSON BRICK EAST/MINCHEW PIT	SCG730503 MINOR INDUSTRIAL
HALFWAY SWAMP CREEK TRIBUTARY HANSON BRICK EAST/BAUKNIGHT MINE	SCG730508 MINOR INDUSTRIAL
SALUDA RIVER SATTERFIELD CONSTRUCTION CO./LONG FARM MINE	SCG731106 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM *MUNICIPALITY* *RESPONSIBLE PARTY* *IMPLEMENTING PARTY*	*NPDES#* *MS4 PHASE* *MS4 SIZE*
BUSH RIVER CITY OF NEWBERRY CITY OF NEWBERRY CITY OF NEWBERRY	---------- PHASE II SMALL MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
CITY OF NEWBERRY LANDFILL DOMESTIC	---------- INACTIVE
NEWBERRY CO. CC LANDFILL CC	---------- INACTIVE
CHAMPION BUILDING PRODUCTS INDUSTRIAL	---------- INACTIVE

CHAMPION FOREST PRODUCTS	362491-1301
C&D	INACTIVE
COOPERS IND. WASTE DUMP	PROPOSED
DOMESTIC	INACTIVE
SOUTHEASTERN RES. REC. INC.	362624-1601
INDUSTRIAL	ACTIVE

Mining Activities

MINING COMPANY ***MINE NAME***	***PERMIT #*** ***MINERAL***
RICHTEX CORP.	0277-47
HICKS MINE	SHALE
HANSON BRICK EAST	0155-81
BAUKNIGHT MINE	SHALE
HANSEN BRICK COLUMBIA	1261-81
MINCHEW PIT	CLAY

Water Quantity

WATER USER ***STREAM***	***REGULATED CAPACITY (MGD)*** ***PUMPING CAPACITY (MGD)***
CITY OF NEWBERRY	21.4
SALUDA RIVER	12.6

Growth Potential

This watershed contains the City of Newberry and portions of the City of Clinton and the Towns of Joanna, Prosperity, and Silverstreet. The growth along the Saluda arm of Lake Murray has been strong and is for the most part residential. The Town of Prosperity is serviced by the Newberry County Water and Sewer Authority, which operates a regional WWTP that discharges into the Broad River Basin via Cannons Creek.

Watershed Protection and Restoration Strategies

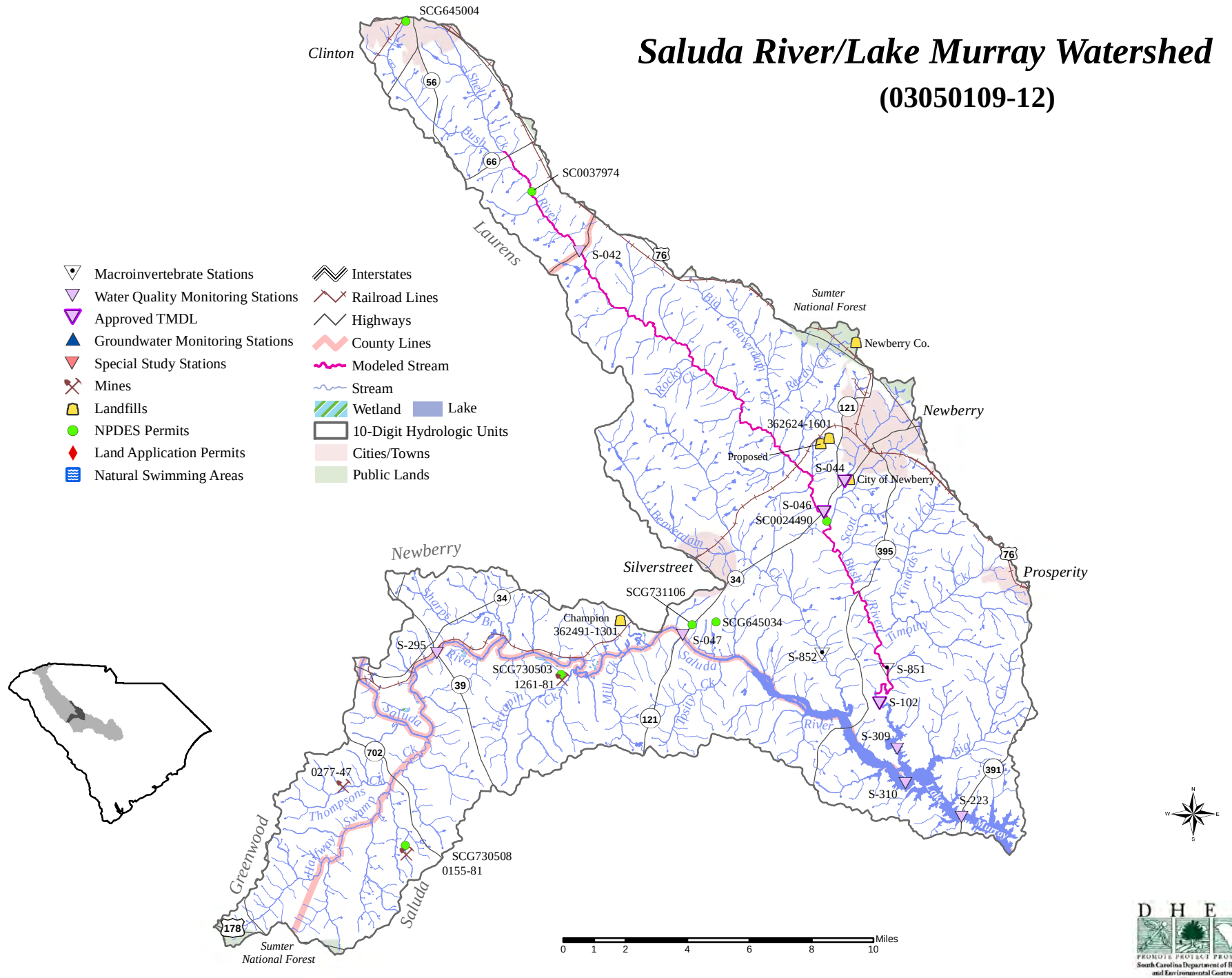
Total Maximum Daily Loads (TMDLs)

TMDLs were developed by SCDHEC and approved by EPA for the **Bush River** at water quality monitoring sites S-046 and S-102. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. Due to limits in source identification information, water quality data, land use, and other data limitations, this TMDL is only an initial estimate. This TMDL will begin the process of a phased implementation of measures that will ultimately result in achievement of fecal coliform bacteria standards in the Bush River. As implementation progresses, and/or more data are obtained, this TMDL may be revised accordingly to facilitate the most efficient remediation of fecal coliform bacterial pollution to the Bush River. The nonpoint source component of the Bush River TMDL has been implemented using

§319 grant funds. Implementation was completed in October 2007. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.

A TMDL was developed by SCDHEC and approved by EPA for **Scott Creek** at water quality monitoring site S-044. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There was no NPDES facility permitted to discharge fecal coliform bacteria in this watershed. At the time the TMDL was developed there were no designated MS4s in the watershed. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, agricultural activities, and wildlife. The TMDL requires a reduction of 82% in fecal coliform loading for this stream to meet the recreational use standard.

Saluda River/Lake Murray Watershed
(03050109-12)



03050109-13

(Saluda River/Lake Murray)

General Description

Watershed 03050109-13 (formerly 03050109-190, 200) is located in Newberry, Saluda, Lexington, and Richland Counties and consists primarily of the ***Saluda River*** and its tributaries from the ***Lake Murray*** headwaters to the dam. The watershed occupies 165,195 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 45.8% forested land, 25.8% water, 17.6% agricultural land, 9.1% urban land, 0.9% forested wetland (swamp), and 0.8% barren land.

The Saluda River watershed is joined by the Little Saluda River watershed to form the headwaters of Lake Murray. Spring Creek, Hawleek Creek, Rocky Creek (Whetstone Creek), Buffalo Creek, Hancock Creek, and Shirey Branch flow into the waters of upper Lake Murray. Camping Creek (Susannah Branch, Snap Branch, Stevens Creek, Millers Branch) and Bear Creek (Rocky Branch, Buzzards Branch, Stinking Creek) enter midlake on the northern shore, and Hollow Creek (Caney Branch, Little Creek, Horse Creek, Little Horse Creek, Little Hollow Creek, Hollow Branch), Beaverdam Creek (John Seay Creek), and Rocky Creek (Clemons Branch, Beech Creek) enter midlake on the southern shore of the lake. Johns Creek (Wyse Branch) and High Hill Creek (Lowman Creek, Cedar Creek, Mets Creek, Beards Creek, Sites Branch, Indian Fork) enter downlake on the northern shore, and Dudley Creek, Twentymile Creek, Frey Branch, and Eighteenmile Creek (Sixteenmile Creek) enter downlake on the southern shore near the dam. Lake Murray is owned and operated by SCE&G Company and is used for power production, recreation, and water supply. Billy Dreher State Park, located midlake on Billy Dreher Island is another natural resource in the watershed. There are a total of 325.6 stream miles (tributaries of Lake Murray) and 43,766.0 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
RL-05420	RL05	FW	LAKE MURRAY, 0.7 MI NNW OF LAKE MURRAY SHORES
S-279	W	FW	LAKE MURRAY AT MARKER 63
S-211	W	FW	LAKE MURRAY, HOLLANDS LANDING OFF S-36-26
S-212	W	FW	LAKE MURRAY, MACEDONIA LANDING AT END OF S-36-26
S-977	SSS	FW	HOLLOW CREEK AT DERRICK HOLLOW ROAD
S-976	SSS	FW	HOLLOW CREEK AT DOG LEG ROAD
S-978	SSS	FW	LITTLE CREEK AT DEVILS BACKBONE ROAD
S-975	SSS	FW	HOLLOW CREEK AT PASTURE EDGE IMMEDIATELY UPSTREAM OF S-306
S-306	INT	FW	HOLLOW CREEK AT S-32-54
S-974	SSS	FW	HOLLOW CREEK AT LAKE MURRAY
S-973	SSS	FW	LAKE MURRAY AT RIDGE ROAD
RL-04372	RL04	FW	LAKE MURRAY, HOLLOW CREEK ARM, 1.75 MI NNE OF US 378 CROSSING
S-280	W	FW	LAKE MURRAY AT MARKER 102
S-290	W	FW	CAMPING CREEK S-36-202 BELOW GA PACIFIC

S-850	BIO	FW	CAMPING CREEK AT SR 72
S-213	W	FW	LAKE MURRAY AT S-36-15
RL-05418	RL05	FW	LAKE MURRAY, 0.38 MI SSE OF S-32-1322
RL-05410	RL05	FW	LAKE MURRAY AT END OF SHULL ISLAND AT THE END OF S-32-115
RL-03338	RL03	FW	L. MURRAY, 0.8 MI S OF COUNTS ISLAND & 0.75 MI NW OF LUNCH ISLAND
RL-06440	RL06	FW	LAKE MURRAY, 0.95 MI NE OF END OF S-32-1239
S-273	W	FW	LAKE MURRAY AT MARKER 166
RL-03334	RL03	FW	LAKE MURRAY, COVE 1.3 MI W OF BALLENTINE
S-274	W	FW	LAKE MURRAY AT MARKER 143
RL-06442	RL06	FW	LAKE MURRAY, 0.65 MI NW JUNCTION OF S-32-109 & S-32-38
RL-02316	RL02	FW	LAKE MURRAY, SW OF JAKES MARINA
S-204	W	FW	LAKE MURRAY AT DAM AT SPILLWAY (MARKER 1)
CL-083	INT	FW	LAKE MURRAY FOREBAY EQUIDISTANT FROM DAM AND SHORELINES

Lake Murray **-** Lake Murray is a 51,000-acre impoundment on the Saluda River, with a maximum depth of approximately 189.6 feet and an average depth of approximately 41.3 feet. The lake's watershed comprises 1,193.2 square miles. There are twenty SCDHEC monitoring stations along the Saluda River's path through Lake Murray, not including the stations located in the major arms of the lake. In the headwaters area of the lake, ***RL-05420*** and ***S-279*** are fully supported for aquatic life and recreational uses. Significant decreasing trends in turbidity, total phosphorus concentration, total nitrogen concentration, and fecal coliform bacteria concentration at S-279 suggest improving conditions for these parameters. There is a significant increasing trend in pH at S-279. Further downlake ***(S-212)***, aquatic life uses are partially supported due to pH excursions. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus suggests improving conditions for this parameter. Recreational uses are fully supported.

In the midlake section of Lake Murray, ***S-280***, ***RL-05418***, and ***RL-05410*** are all fully supported for aquatic life and recreational uses. There is a significant increasing trend in pH at S-280. Significant decreasing trends in turbidity and total nitrogen concentration suggest improving conditions for these parameters at this site.

In the downlake section of Lake Murray (open water), ***RL-03338***, ***RL-06440, S-273, S-274, RL-06442,*** and ***S-204*** are all fully supported for aquatic life and recreational uses; however, S-273 has a significant increasing trend in five-day biochemical oxygen demand. S-273, S-274, and S-204 all have significant increasing trends in pH. They also all have significant decreasing trends in turbidity, total phosphorus concentration, total nitrogen concentration, and fecal coliform bacteria concentration, which suggest improving conditions for these parameters at these sites. Near the dam, ***CL-083*** is not supporting of aquatic life uses due to occurrences of copper in excess of the aquatic life chronic criterion. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration. *Fish tissue analyses on species caught within Lake Murray indicate no advisories or restrictions on consumption of fish from these waters.*

"No Discharge" Designation for Lake Murray

In May 2000, Lake Murray was designated a ***No Discharge*** lake for marine toilets due to the lake's role as a major water recreation area, a container of drinking water intakes, and as an area of increasingly intensive boating activities. The increasing number of houseboats and vessels moored and operated on the lake with marine toilets became a source of concern about potential degradation of the lake in the future. Federal and state law prohibits the discharge of untreated sewage into waters of the United States, but treated sewage from marine toilets previously has been permitted, provided it has undergone some treatment and disinfection. Because microorganisms can continue to thrive after rudimentary treatment by on-board marine toilets, discharges may be completely banned from such waterbodies to protect the public's health, safety, and welfare. Federal law allows states to completely ban discharges if it can be demonstrated that adequate and accessible pump out facilities are available. DHEC determined this to be the case with seven marinas around Lake Murray designated for treatment and disposal. The law banning discharges applies to large vessels with onboard toilets that previously were allowed to discharge treated wastes into the lake.

Buffalo Creek Arm of Lake Murray (S-211) – Aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. Significant decreasing trends in total phosphorus concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters.

Hollow Creek – There are four SCDHEC monitoring stations along Hollow Creek. Several of the stations are special study stations that were only monitored for fecal coliform bacteria levels. Recreational uses are not supported at ***S-977*** and ***S-976*** due to fecal coliform bacteria excursions. Recreational uses are fully supported at ***S-975***. Aquatic life uses are fully supported at ***S-306***, but recreational uses are not supported due to fecal coliform bacteria excursions.

Little Creek (S-978) – This is a special study station that was only monitored for fecal coliform bacteria levels. Recreational uses fully supported.

Hollow Creek Arm of Lake Murray - There are three SCDHEC monitoring stations along the Hollow Creek arm of Lake Murray. Several of the stations are special study stations that were only monitored for fecal coliform bacteria levels. Recreational uses are fully supported at ***S-974*** and ***S-973***. Aquatic life and recreational uses are fully supported at ***RL-04372***.

Camping Creek – There are two SCDHEC monitoring stations along Camping Creek. At the upstream site ***(S-290)***, aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. 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. At the downstream site ***(S-850)***, aquatic life uses are partially supported based on macroinvertebrate community data.

Camping Creek Arm of Lake Murray (S-213) – Aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

High Hill Creek Arm of Lake Murray – Aquatic life and recreational uses are fully supported.

Sixteenmile Creek Arm of Lake Murray - Aquatic life and recreational uses are fully supported.

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-072	GB	PIEDMONT BEDROCK	BALLENTINE
AMB-064	GB	PIEDMONT BEDROCK	LITTLE MOUNTAIN
AMB-041	GB	MIDDENDORF	SUMMIT

All water samples collected from ambient monitoring well ***AMB-072, AMB-064,*** and ***AMB-041*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME***	***NPDES#*** / ***TYPE***
BEAR CREEK TRIBUTARY	SCG730693
METTS CONSTRUCTION/METTS CLAY MINE	MINOR INDUSTRIAL
MILLERS BRANCH TO STEVENS CREEK	SC0032042
THE RICECHILD GROUP/MII-DERA	MINOR DOMESTIC

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM / ***MUNICIPALITY*** / ***RESPONSIBLE PARTY*** / ***IMPLEMENTING PARTY***	***NPDES#*** / ***MS4 PHASE*** / ***MS4 SIZE*** / ***COUNTY***
LAKE MURRAY	SCS400001
---------	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	
LAKE MURRAY	SCS400001
UNINCORPORATED AREAS	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	

LAKE MURRAY	SCR036304
UNINCORPORATED AREAS	PHASE II
LEXINGTON COUNTY	SMALL MS4
LEXINGTON COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
MARTIN CONTRACTING COMPOSTING	412658-3001
COMPOST	INACTIVE
LEXINGTON CO. SANITARY LANDFILL #3	----------
MSW	INACTIVE
METTS WOOD RECYCLING	362750-3001
COMPOSTING	ACTIVE
METTS LCD & YT LANDFILL	362490-1701
C&D	ACTIVE
GA PACIFIC PROSPERITY PLYWOOD ISW LF	363304-1601
ISW	ACTIVE

Land Applications

LAND APPLICATION	***PERMIT #***
FACILITY NAME	***TYPE***
SPRAY IRRIGATION	ND0062219
NCW&SA/BEDFORD WAY	DOMESTIC
TILE FIELD	ND0019640
AAA UTILITIES/MALLARD BAY SD.	DOMESTIC
TILEFIELD	ND0060577
NCW&SA/NEWBERRY SHORES	DOMESTIC
LOW PRESSURE IRRIGATION SYSTEM	ND0007994
CWS/SMALL WOODS ESTATES	DOMESTIC

Mining Activities

MINING COMPANY	***PERMIT #***
MINE NAME	***MINERAL***
METTS CONSTRUCTION INC.	1449-71
METTS CLAY MINE	CLAY

Water Quantity

WATER USER STREAM	*REGULATED CAPACITY (MGD) PUMPING CAPACITY (MGD)*
CITY OF COLUMBIA	100.0
LAKE MURRAY	75.0
CITY OF WEST COLUMBIA	23.0
LAKE MURRAY	37.0
NEWBERRY CO. W&SA	2.0
LAKE MURRAY	1.0

Growth Potential

This watershed contains portions of the Towns of Prosperity, Little Mountain, Chapin, Summit and Lake Murray. There is and will be continued growth in areas bordering and surrounding Lake Murray. The widening of US 378 to four lanes has increased the expansion rate along the Lexington side of the lake. US 76 runs along the opposite shoreline of the lake, as does a rail line. The widening of I-26 toward the Chapin\Pomaria Exit is encouraging growth on both sides of the interstate.

Residential development continues to grow within the lake region. The area around the dam is the most developed and has water and sewer. The Richland County portion of the lake is also well developed and has several residential subdivisions where water and sewer are available. This will facilitate continued development along the shoreline as well as development along US 378. The Central Midlands Regional Council of Government has completed a §208 planning study, which includes population and growth projections for the area. SC 6 has been widened across the Lake Murray Dam leading into the Town of Lexington.

The upper lake region in Newberry County is primarily rural: a few small subdivisions, some industry, and agricultural activities on a small scale. The Town of Prosperity and a large portion of lower Newberry County extending to Dreher Island State Park is serviced by the Newberry County Water and Sewer Authority, which operates a regional WWTP that discharges into the Broad River Basin via Cannons Creek.

Lake Murray, as the main water-based recreational resource in the region, draws millions of visitors annually to its numerous parks, recreational areas, and waterways. All aspects of growth surrounding Lake Murray (tourist industry, residential development, agricultural activities) are expected to continue.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

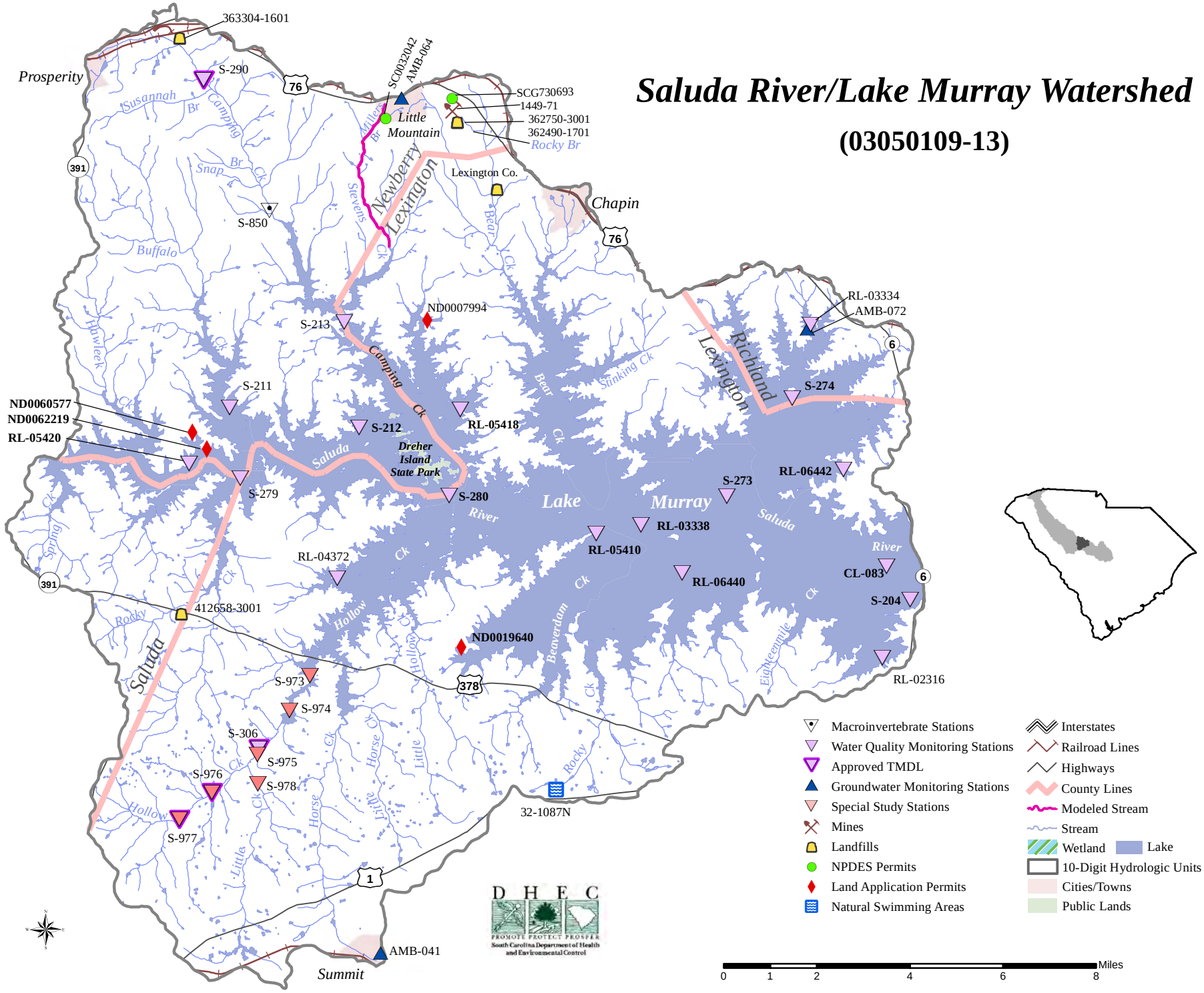
A TMDL was developed for SCDHEC and approved by EPA for **Camping Creek** at water quality monitoring site S-290. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. There is no active NPDES facility permitted to discharge fecal coliform bacteria in the Camping Creek watershed. This watershed has

no designated or potential MS4s. Possible sources of fecal coliform bacteria in this watershed are failing septic systems, cattle watering in the creeks, and birds and wildlife. The TMDL requires a reduction of 95% in fecal coliform loading for this stream to meet the recreational use standard.

A TMDL was developed for SCDHEC and approved by EPA for **Hollow Creek** at water quality monitoring site S-306. There was no NPDES facility permitted to discharge fecal coliform bacteria in this watershed. None of this watershed has been designated as a MS4. Possible sources of fecal coliform bacteria in this watershed are failing septic systems, cattle watering in the creeks, and birds and wildlife. The TMDL requires a reduction of 99% in fecal coliform loading for this stream to meet the recreational use standard. The nonpoint source component of the Hollow Creek TMDL is currently being implemented using §319 grant funds. Implementation is scheduled to be completed in June 2013. For more information on §319 grants, visit http://www.scdhec.gov/environment/water/grants.htm#319.

Saluda River/Lake Murray Watershed

(03050109-13)



03050109-14

(Saluda River)

General Description

Watershed 03050109-14 (formerly 03050109-210) located in Lexington and Richland Counties and consists primarily of the lowest reach of the ***Saluda River*** and its tributaries from the Lake Murray dam to its confluence with the Broad River. The watershed occupies 65,609 acres of the Piedmont and Sandhill regions of South Carolina. Land use/land cover in the watershed includes: 41.6% urban land, 32.5% forested land, 19.2% agricultural land, 4.0% forested wetland (swamp), 1.7% water, 0.7% barren land, and 0.3% nonforested wetland (marsh).

This lowest section of the Saluda River flows out of the Lake Murray dam and merges downstream with the Broad River Watershed to form the Congaree River Watershed in the City of Columbia. The lower Saluda River is protected under the S.C. Scenic Rivers Act. Rawls Creek (Yost Creek, Koon Branch), Lorick Branch, and Kinley Creek drain into the Saluda River near the City of Irmo. Juniper Creek and Long Creek (Pine Branch, Hamburg Branch) join to form Twelvemile Creek near the Town of Gilbert. Twelvemile Creek accepts drainage from Hogpen Branch, Fall Branch, and Boggy Branch before flowing through the Town of Lexington to accept the drainage of Fourteenmile Creek (Long Branch) and enter the river. Some of the ponds encountered by Twelvemile Creek include: Barr Lake, Gibsons Pond, Lexington Mill Pond, and Corley Mill Pond. Stoop Creek, Senn Branch, and Double Branch enter the Saluda River just prior to its confluence with the Broad River. There are a total of 196.5 stream miles and 1,161.7 acres of lake waters in this watershed. The mainstem of this section of the Saluda River is classified TGPT* (*DO not less than daily average of 5 mg/l), and all other streams are classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-152	W	TPGT*	SALUDA RIVER JUST BELOW LAKE MURRAY DAM
S-287	W/BIO	FW	RAWLS CREEK AT S-32-107
S-149	W	TPGT*	SALUDA RIVER AT MEPCO ELECTRIC PLANT WATER INTAKE
S-150	W	FW	LORICK BRANCH AT POINT UPSTREAM OF JUNCTION WITH SALUDA RIVER
S-052	BIO	FW	TWELVEMILE CREEK AT SR 106
RS-02457	RS02	FW	TWELVEMILE CREEK AT S-32-106
S-294	W	FW	TWELVEMILE CREEK AT U.S. 378
S-848	BIO	FW	FOURTEENMILE CREEK AT SR 28
S-260	W/BIO	FW	KINLEY CREEK AT S-32-36 (ST. ANDREWS ROAD) IN IRMO
S-298	INT	TPGT*	SALUDA RIVER AT USGS GAGING STATION, 1/2 MILE BELOW I-20

Saluda River **-** There are three SCDHEC monitoring stations along this section of the Saluda River. Just below the Lake Murray dam ***(S-152)***, aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in total suspended solids. There is a significant increasing trend in pH. Significant increasing trends in dissolved oxygen concentration and decreasing trends in turbidity and fecal coliform bacteria concentration suggest improving conditions

for these parameters at this site. Further downstream ***(S-149)***, aquatic life uses are not supported due to turbidity excursions. In addition, there is a significant increasing trend in total suspended solids. 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 at this site due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration. At the downstream site ***(S-298)***, aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and total suspended solids. There is a significant increasing trend in pH. Significant increasing trends in dissolved oxygen concentration and decreasing trends in turbidity, total phosphorus concentration, and fecal coliform bacteria concentration suggest improving conditions for these parameters at this site.

Rawls Creek (S-287) – Aquatic life uses are not supported based on macroinvertebrate community data and due to turbidity excursions. In addition, there is a significant increasing trend in total suspended solids. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions

Lorick Branch (S-150) – Aquatic life uses are not supported due to dissolved oxygen excursions. There is a significant increasing trend in pH. Significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions

Twelvemile Creek – There are three SCDHEC monitoring stations along Twelvemile Creek. At the upstream site ***(S-052)***, aquatic life uses are partially supported based on macroinvertebrate community data. At the midstream site ***(RS-02457)***, aquatic life uses are fully supported, but recreational uses are not supported due to fecal coliform bacteria excursions. At the downstream site ***(S-294)***, aquatic life uses are fully supported. There is a significant increasing trend in pH. Recreational uses are not supported at this site due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

Fourteen Mile Creek (S-848) – Aquatic life uses are partially supported based on macroinvertebrate community data.

Kinley Creek (S-260) – Aquatic life uses are partially supported based on macroinvertebrate community data. In addition, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in total phosphorus concentration and total suspended solids. Recreational uses are not supported due to fecal coliform bacteria excursions.

A fish consumption advisory has been issued by SCDHEC for mercury and includes the Saluda River within this watershed (see advisory p.40).

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-103	GB	TERTIARY SANDS	OAK GROVE ELEMENTARY SCHOOL

All water samples collected from ambient monitoring well ***AMB-103*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME*	*NPDES#* *TYPE*
SALUDA RIVER SCE&G/MCMEEKIN STEAM STATION	SC0002046 MAJOR INDUSTRIAL
SALUDA RIVER SCE&G/SALUDA HYDRO STATION	SC0002071 MINOR INDUSTRIAL
SALUDA RIVER SHAW INDUSTRIES GROUP/COLUMBIA SITE	SC0003557 MAJOR INDUSTRIAL
SALUDA RIVER WOODLAND UTILITIES	SC0029475 MINOR DOMESTIC
SALUDA RIVER BUSH RIVER UTILITIES WWTP	SC0032743 MINOR DOMESTIC
SALUDA RIVER CWS/I-20 REGIONAL SEWER SYSTEM	SC0035564 MINOR DOMESTIC
SALUDA RIVER CWS/FRIARSGATE SD	SC0036137 MINOR DOMESTIC
SALUDA RIVER PHILLIPS ELECTRONICS NA	SC0048330 MINOR INDUSTRIAL
KINLEY CREEK SHAW INDUSTRIES GROUP/COLUMBIA SITE	SC0003557 MAJOR INDUSTRIAL
TWELVEMILE CREEK TOWN OF LEXINGTON/COVENTRY WOODS SD	SC0026735 MAJOR DOMESTIC
FOURTEENMILE CREEK CWS/WATERGATE DEVELOPMENT	SC0027162 MINOR DOMESTIC
STOOP CREEK ALPINE UTILITIES/STOOP CREEK WWTP	SC0029483 MINOR DOMESTIC

HAMBURG BRANCH	SCG730618
SOUTHEASTERN ASSOC./LEXINGTON	MINOR INDUSTRIAL
SALUDA RIVER	SCG730640
BORAL BRICKS/CORLEY MILL MINE	MINOR INDUSTRIAL
SALUDA RIVER	SCG730672
LA BARRIER/ZENKER ROAD PIT	MINOR INDUSTRIAL
SALUDA RIVER	SCG730701
S&T RECYCLING LLC MINE	MINOR INDUSTRIAL
SALUDA RIVER	SCG731103
HENDON COLUMBIA/HENDON CORLEY MINE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	***COUNTY***
TWELVEMILE CREEK	SCS790001
CITY OF COLUMBIA	PHASE I
CITY OF COLUMBIA	MEDIUM MS4
CITY OF COLUMBIA	LEXINGTON
TWELVEMILE CREEK	SCS400001
----------	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	
TWELVEMILE CREEK	SCS790001
CITY OF COLUMBIA	PHASE I
CITY OF COLUMBIA	MEDIUM MS4
CITY OF COLUMBIA	RICHLAND
TWELVEMILE CREEK	SCR036302
CITY OF IRMO	PHASE II
CITY OF IRMO	SMALL MS4
LEXINGTON COUNTY	
TWELVEMILE CREEK	SCR036303
TOWN OF LEXINGTON	PHASE II
TOWN OF LEXINGTON	SMALL MS4
LEXINGTON COUNTY	
TWELVEMILE CREEK	SCR036304
UNINCORPORATED AREAS	PHASE II
LEXINGTON COUNTY	SMALL MS4
LEXINGTON COUNTY	
TWELVEMILE CREEK	SCR036308
CITY OF WEST COLUMBIA	PHASE II
CITY OF WEST COLUMBIA	SMALL MS4
LEXINGTON COUNTY	

TWELVEMILE CREEK TOWN OF IRMO TOWN OF IRMO TOWN OF IRMO	SCR036302 PHASE II SMALL MS4
TWELVEMILE CREEK UNINCORPORATED AREAS RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE I MEDIUM MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME ***FACILITY TYPE***	***PERMIT #*** ***STATUS***
SCE&G McMEEKIN STEAM STATION INDUSTRIAL	323320-1601 ACTIVE
ALLIED FIBERS CORP. INDUSTRIAL	323319-1601 INACTIVE
MUSTARD COLEMAN CONSTRUCTION INDUSTRIAL	IWP-001 INACTIVE
EAGLE RECOVERY WOOD GRINDING COMPOSTING	322754-3001 ACTIVE
SOUTHEASTERN ASSOC. LCD/YT LF C&D	322428-1701 ACTIVE
SOUTHEASTERN ASSOC. C&D LF C&D	322428-1201 ACTIVE
BALL PARK ROAD DUMP MUNICIPAL	---------- INACTIVE
HWY 378 C&D LANDFILL C&D	322903-1301 INACTIVE
CORLEY MILL BUILDERS, INC. LCD&YT LF C&D	322471-1701 INACTIVE
SLIGH PROPERTIES LCD&YT LANDFILL C&D	322470-1701 ACTIVE
S&T RECYCLING LCD LANDFILL C&D	322456-1703 ACTIVE
S&T RECYCLING GRADING WOOD PROCESSING FAC. COMPOSTING	322456-3001 ACTIVE

S&T RECYCLING WOOD PROCESSING FACILITY COMPOSTING	322456-3002 ACTIVE
HWY 1 LCD&YT LANDFILL (S&T GRADING) C&D	322456-1701 INACTIVE
HWY 378 LCD&YT LANDFILL (S&T GRADING) C&D	322456-1702 ACTIVE
HWY 378 C&D LANDFILL (S&T GRADING) C&D	322456-1202 ACTIVE
CRANDALL CORP. INDUSTRIAL	322704-2001 ACTIVE
BUSH RIVER C&D LANDFILL C&D	---------- INACTIVE
CELANESE FIBERS CO. INDUSTRIAL	---------- INACTIVE
MEPCO ELECTRA, INC. INDUSTRIAL	---------- INACTIVE
BC COMPONENTS, INC. (PHILLIPS COMPONENTS) C&D	323347-1901 INACTIVE
SCE&G INDUSTRIAL	---------- INACTIVE
GIST BACKHOE & GRINDING SERVICE COMPOSTING	402445-3001 INACTIVE

Land Applications

LAND APPLICATION FACILITY NAME	***PERMIT # TYPE***
SEDIMENTATION/PERCOLATION POND CMC METAL RECYCLING	ND0077101 INDUSTRIAL
SPRAY IRRIGATION CAUGHMANS MEAT PLANT	ND0072702 INDUSTRIAL

Mining Activities

MINING COMPANY MINE NAME	***PERMIT # MINERAL***
SOUTHEASTERN ASSOC., INC. LEXINGTON COUNTY #1 MINE	1097-63 SAND
BORAL BRICK, INC. CORLEY MILL MINE	0028-63 SHALE

RICHARDSON CONSTRUCTION CO. RICHARDSON'S IRMO MINE	0781-63 CLAY
S&T RECYCLING LLC S&T RECYCLING MINE	1584-63 SAND/CLAY

Water Quantity

WATER USER ***STREAM***	***REGULATED CAPACITY (MGD)*** ***PUMPING CAPACITY (MGD)***
CITY OF WEST COLUMBIA SALUDA RIVER	6.0 13.0

Growth Potential

There is a high potential for future residential and industrial development in this watershed, which contains the Town of Lexington and portions of the Cities of Columbia and West Columbia, and the Towns of Gilbert, Summit, and Irmo. The area surrounding the Town of Lexington has grown rapidly during the past several years and the trend should continue. Several important highways run through the area including: SC 6, which runs from the Lake Murray dam south through the Town of Lexington, and US 1 and US 378, which run west from the City of West Columbia and intersects with Highway 6 in Lexington; I-20 also serves the area. The watershed's industrial corridor is one of the most economically attractive in the Midlands Area for future development. Once sewer is readily available, residential development is expected to increase. The regional sewer line along Fourteenmile Creek is now in operation.

The construction of a water plant on the shore of Lake Murray north of the Town of Lexington has made available a water supply sufficient to support development. The City of West Columbia and Lexington County have extended major water mains in the area. Non-industrial dischargers in this basin are targeted by the §208 Regional Water Quality Management Plan for elimination with effluent to be transported to the City of Cayce's WWTP for treatment. Components of the regional system have either been constructed, are presently being constructed, or are presently being designed for the non-industrial dischargers on the south side of the Saluda River. These facilities will be consolidated after the system is available and it becomes economically feasible to connect. The facilities on the north side of the river are still in operation and will continue to operate as temporary facilities until a regional system is put in place. At present there are no plans for the design and construction of the necessary regional collection infrastructure. If conceptual plans to consolidate these facilities are implemented at some point in the future, it will result in a decrease of discharge levels into the lower portion of the Saluda River. The City of Cayce is in the process of expanding their regional WWTP to 25 million gpd and it is expected to come online in 2012. Though a percentage of this additional capacity is already committed, it is expected that this expansion will accommodate future growth in Lexington County.

Watershed Protection and Restoration Strategies

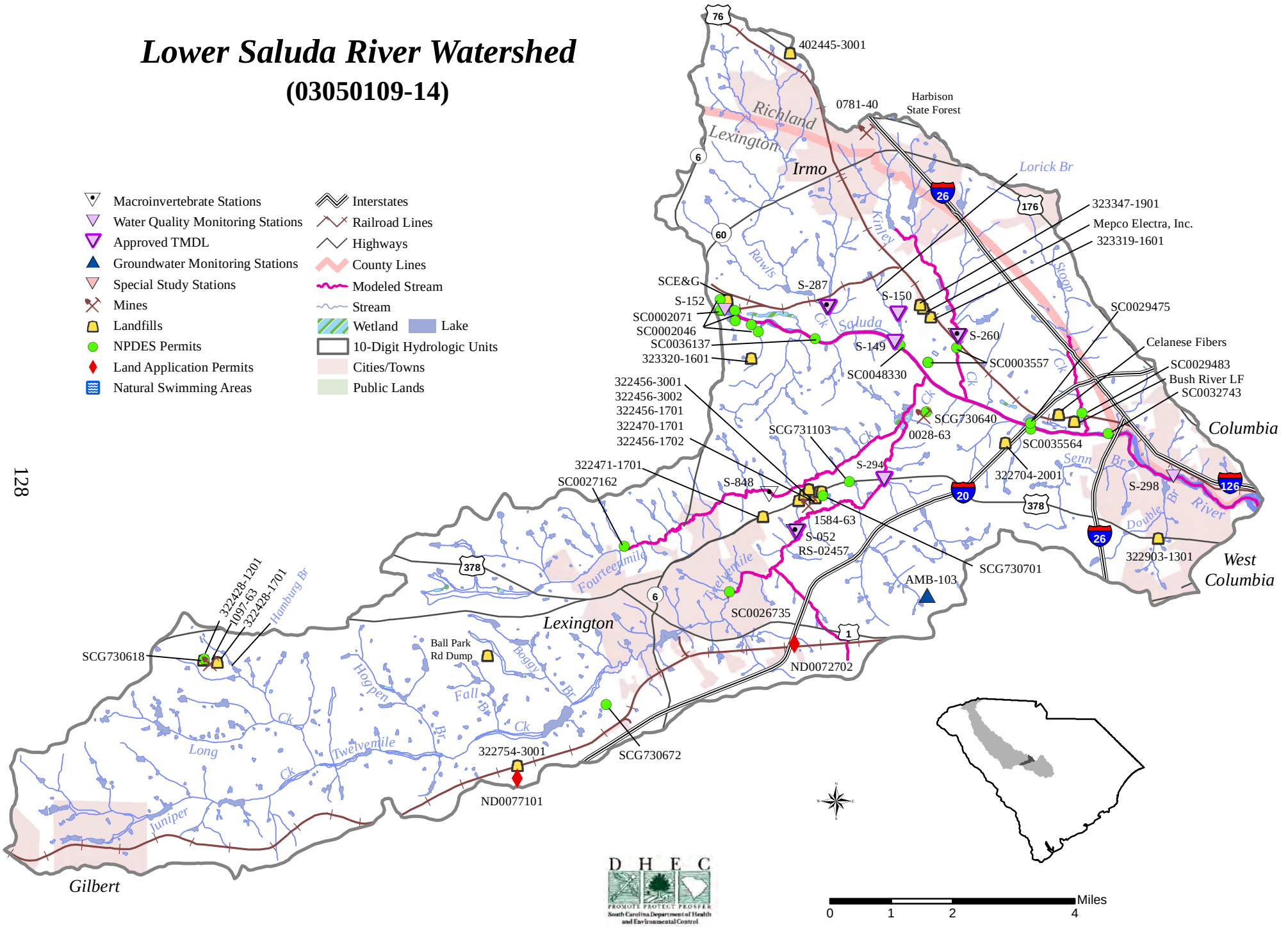
Total Maximum Daily Loads (TMDLs)

A TMDL was developed by SCDHEC and approved by EPA for **Rawls Creek** at water quality monitoring site S-287. TMDLs determine the maximum amount of fecal coliform bacteria waterbodies can receive and still meet water quality standards. Urban and forest are the two major land uses in the Rawls Creek watershed. Both can be sources of fecal coliform bacteria. Targeting urban land for reduction of bacteria is the most effective strategy for this watershed. The target level of bacteria is 175 colonies/100ml, an urban reduction of 69%. Forested lands are not targeted for reduction, as there are currently no acceptable means of reducing fecal coliform sources within that land use. There are several tools available for implementing this TMDL, including an ongoing §319 funded project, as well as NPS pollution outreach activities and materials. SCDHEC will continue to monitor water quality in Rawls Creek to evaluate the effectiveness of these measures.

A TMDL was developed by SCDHEC and approved by EPA for **Lorick Branch** at water quality monitoring site S-150. There was no NPDES facility permitted to discharge fecal coliform bacteria in this watershed. The entire watershed has been designated as a MS4. Possible sources of fecal coliform bacteria in this watershed are leaking sanitary sewers, sanitary sewer overflows (SSOs), urban runoff, and wildlife. The TMDL requires a reduction of 88% in fecal coliform loading for this stream to meet the recreational use standard.

TMDLs were developed by SCDHEC and approved by EPA for the **Lower Saluda River** and tributaries **Kinley Creek** and **Twelvemile Creek** at water quality monitoring sites S-149, S-260, and S-294. There is a NPDES facility permitted to discharge fecal coliform bacteria on Twelvemile Creek and one on the Saluda River upstream of S-149. Much of this watershed has been designated as one or more MS4s. Possible sources of fecal coliform bacteria in the Twelvemile Creek watershed are leaking sewers, SSOs, failing septic systems, improper land application of manure, cattle watering in the creeks, wildlife, and urban runoff. Fecal coliform sources in the Saluda River and Kinley Creek watersheds are the same except for the agricultural sources. The TMDLs require reductions of 89% to 92% in fecal coliform loading for these streams to meet the recreational use standard.

Lower Saluda River Watershed
(03050109-14)



The Congaree River Basin Description

The ***Congaree River Basin (hydrologic unit 03050110)*** is located in Lexington, Richland, and Calhoun Counties, and encompasses 689 square miles. The 4 watersheds are predominately within the Sandhills region of the State, but giving way to the Upper Coastal Plain region near its confluence with the Wateree River of the Catawba River Basin. The urban land is comprised of the City of Columbia. Of the 441,010 acres in the Congaree River Basin, 34.6% is forested land, 26.6% is agricultural land, 19.0% is forested wetland (swamp), 17.9% is urban land, 0.3% is barren land, 1.3% is water, and 0.3% is nonforested wetland (marsh). The urban land percentage is comprised chiefly by the Greater Columbia Metropolitan area. The Broad River and Saluda River merge to form the Congaree River, which flows southeasterly for 50 miles and merges with the Wateree River to form the Santee River Basin. There are a total of 1,165 stream miles and 5,350 acres of lake waters in the Congaree River Basin. The Catawba River and Santee River Basins are addressed in year three of the Bureau's five-year basin cycle.

Physiographic Regions

The State of South Carolina has been divided into six Major Land Resource Areas (MLRAs) by the USDA Soil Conservation Service. The MLRAs are physiographic regions that have soils, climate, water resources, and land uses in common. The physiographic region that defines the Congaree River Basin is as follows:

The **Sand Hills** are an area of gently sloping to strongly sloping uplands with a predominance of sandy areas and scrub vegetation; elevations range from 250 to 450 feet.

The **Upper Coastal Plain** is an area of gentle slopes with increased dissection and moderate slopes in the northwestern section that contain the state's major farming areas; elevations range from 100 to 450 feet.

Land Use/Land Cover

General land use/land cover mapping for South Carolina was derived from the National Land Cover Data (NLCD). The dataset is based on nationwide Landsat Thematic Mapper (TM) multispectral satellite images (furnished through the Multi-Resolution Land Characteristics (MRLC) consortium, coordinated by USEPA) using image analysis software to inventory the Nation's land classes. The NLCD are developed by the USGS (EROS Data Center) using TM image interpretation, air photo interpretation, National Wetland Inventory data analysis, and ancillary data analysis.

Urban land is characterized by man-made structures and artificial surfaces related to industrial, commercial, and residential uses, and vegetated portions of urban areas such as recreational grass lands and industrial facility lawns.

Agricultural/Grass land is characterized by row crops, pastures, orchards, vineyards, and hay land, and includes grass cover in fallow, scrub/shrub, forest clearcut and urban areas.

Forest land is characterized by deciduous and evergreen trees (or a mix of these), not including forests in wetland settings, generally greater than 6 meters (approximately 20 feet) in height, with tree canopy of 25-100% cover.

Forested Wetland is saturated bottomland, mostly hardwood, forests primarily composed of wooded swamps occupying river floodplains, moist marginal forests, and isolated low-lying wet areas, located predominantly in the Coastal Plain.

Nonforested Wetland is saturated marshland, most commonly located in coastal tidelands and in isolated freshwater inland areas, found predominantly in the Coastal Plain.

Barren land is characterized by a nonvegetated condition of the land, both natural (rock, beaches, nonvegetated flats) and man-induced (rock quarries, mines, and areas cleared for construction in urban areas or clearcut forest areas).

Water (non-land) includes both fresh (inland) and saline (tidal) waters.

Soil Types

The individual soil series for the Congaree River Basin are described as follows.

Alpin soils are well drained and excessively drained, sandy soils with a loamy or sandy subsoil.

Blaney soils are nearly level to strongly sloping, excessively drained and well drained soils, some sandy throughout and some with a loamy subsoil and a fragipan on coastal plains.

Chastain soils are poorly drained to well drained soils that are clayey or loamy throughout and are subject to flooding.

Chewacla soils are nearly level, somewhat poorly drained and well drained soils.

Congaree soils are nearly level, well drained soils that are predominantly loamy throughout, or flood plains.

Dothan soils are well drained, sandy soils with loamy subsoil.

Faceville soils are well drained, sandy soils with a loamy or clayey subsoil.

Fuquay soils are well drained, loamy and sandy soils with clayey or loamy subsoil.

Lakeland soils are well drained, sandy soils with a loamy subsoil and excessively drained soils.

Marlboro soils are well drained soils with a sandy or loamy surface layer and a loamy or clayey subsoil.

Norfolk soils are deep, well drained soils, with loamy subsoil, nearly level and gently sloping elevated uplands.

Pelion soils are well drained and moderately well drained soils that have a sandy surface layer and a loamy subsoil, many with a fragipan in the subsoil.

Tawcaw soils are poorly drained to well drained soils that are clayey or loamy throughout and are subject to flooding.

Vaucluse soils are well drained, loamy and sandy soils with clayey or loamy subsoil.

Slope and Erodibility

The definition of soil erodibility differs from that of soil erosion. Soil erosion may be more influenced by slope, rainstorm characteristics, cover, and land management than by soil properties. Soil erodibility refers to the properties of the soil itself, which cause it to erode more or less easily than others when all other factors are constant.

The soil erodibility factor, K, is the rate of soil loss per erosion index unit as measured on a unit plot, and represents an average value for a given soil reflecting the combined effects of all the soil properties that significantly influence the ease of soil erosion by rainfall and runoff if not protected. The K values closer to 1.0 represent higher soil erodibility and a greater need for best management practices to minimize erosion and contain those sediments that do erode. The range of K-factor values in the Congaree River Basin is from 0.06 to 0.20.

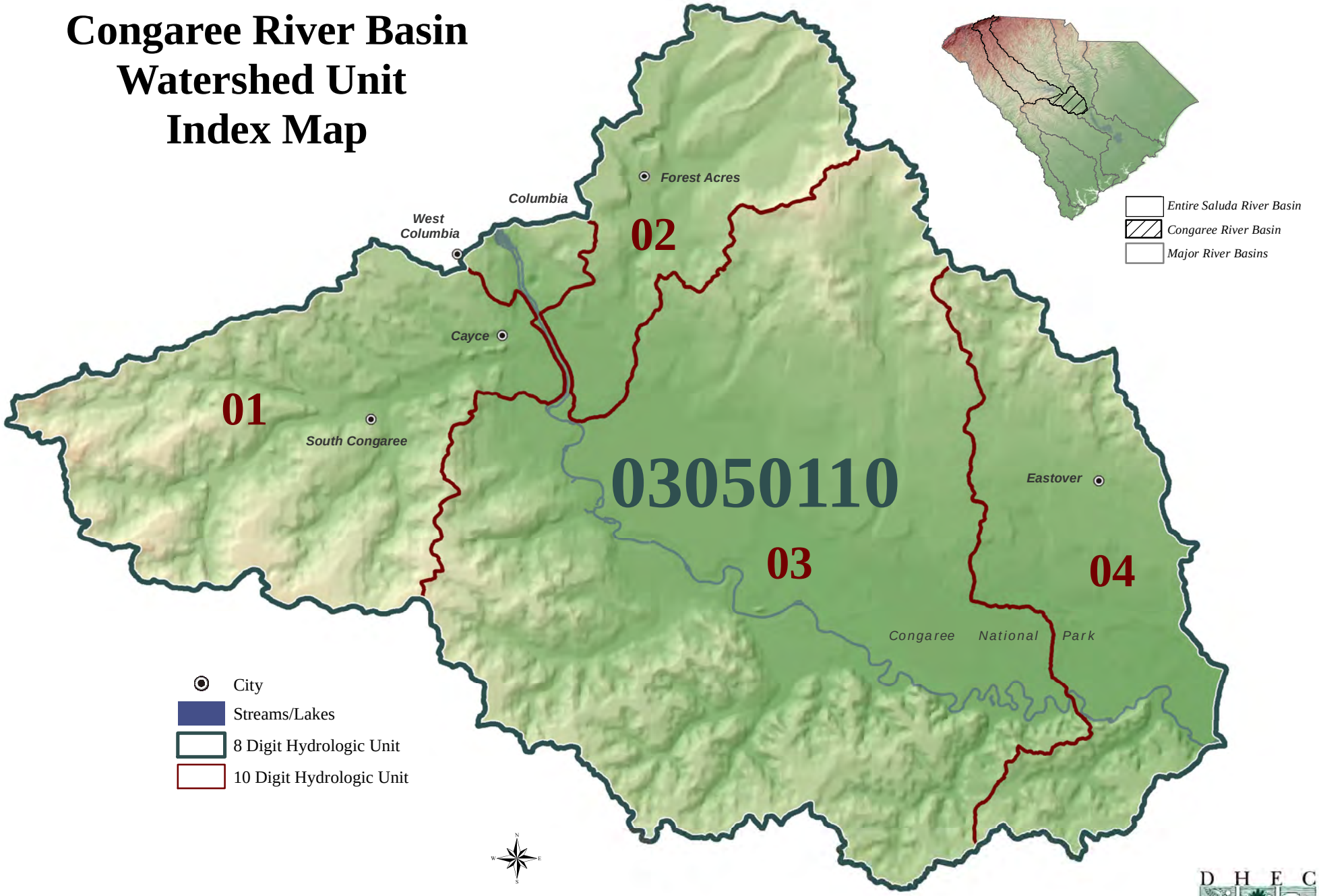
Fish Consumption Advisory

At the time of publication, a fish consumption advisory issued by SCDHEC is in effect for portions of the ***Congaree River, Sesquicentennial State Park Lake,*** and ***Windsor Lake*** advising people to limit the amount of some types of fish consumed from these waters. Fish consumption advisories are updated annually in the spring. For background information and the most current advisories please visit the Bureau of Water homepage at http://www.scdhec.gov/water and click on "Advisories." For more information or a hard copy of the advisories, call SCDHEC's Fish Consumption Advisory toll-free hotline at (888) 849-7241.

Climate

Normal yearly rainfall in the Congaree River area during the period of 1971 to 2000 was 47.61 inches, according to South Carolina's **30-year** climatological record. Data compiled from National Weather Service stations in Columbia at the Columbia Metropolitan Airport and the University of South Carolina were used to determine the general climate information for the Congaree River area. The highest seasonal rainfall occurred in the summer with 15.42 inches; 9.67, 11.78, and 10.74 inches of rain fell in the fall, winter, and spring, respectively. The average annual daily temperature was 64.9°F. Summer temperatures averaged 81.1 °F, and fall, winter, and spring mean temperatures were 65.7 °F, 48.0 °F, and 64.9 °F, respectively.

Congaree River Basin Watershed Unit Index Map



Watershed Evaluations

03050110-01

(Congaree Creek)

General Description

Watershed 03050110-01 (formerly 03050110-020) is located in Lexington County and consists primarily of ***Congaree Creek*** and its tributaries. The watershed occupies 91,330 acres of the Sandhills region of South Carolina. Land use/land cover in the watershed includes: 34.2% forested land, 28.3% agricultural land, 27.7% urban land, 7.7% forested wetland (swamp), 1.0% water, 0.8% barren land, and 0.3% nonforested wetland (marsh).

West Fork and East Fork join to form Scouter Branch, which flows through Redmond Pond and Shealy Pond to enter Congaree Creek. Congaree Creek then flows through Hunt Pond before accepting the drainage from Red Bank Creek (Turkey Creek, Crystal Lake, Lick Fork Branch, Pole Branch). Second Creek (Hunt Branch, Bear Creek, Reedy Branch) flows into First Creek, which then drains into Congaree Creek. Congaree Creek also accepts the drainage from Savana Branch (Pitts Lake), Sixmile Creek (Lake Caroline), and Dry Creek. There are a total of 198.1 stream miles and 1,548.1 acres of lake waters in this watershed, all classified FW. The Congaree Creek watershed drains into the Congaree River near the City of Cayce. Another natural resource in the watershed is the Peachtree Rock Nature Preserve, located at the headwaters of Hunt Branch.

Surface Water Quality

Station #	Type	Class	Description
C-565	BIO	FW	Congaree Creek at SR 34
C-580	BIO	FW	Red Bank Creek at road connecting SR 1260 & SR 243
C-066	W	FW	Red Bank Creek at S-32-244
C-067	W	FW	Red Bank Creek at Sandy Springs Road between S-32-104 & SC602
C-583	BIO	FW	Second Creek at SR 647
C-061	W	FW	Savana Branch at S-32-72 1.7 miles NNW of South Congaree
C-008	W	FW	Congaree Creek at US 21, at Cayce water intake
C-025	W	FW	Lake Caroline spillway at Platt Springs Road
C-005	W	FW	Sixmile Creek on US 21, S of Cayce
C-070	INT	FW	Congaree Creek at S-32-66

Congaree Creek – There are three SCDHEC monitoring stations along Congaree Creek. At the upstream site ***(C-565)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the midstream site ***(C-008)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Significant increasing trends in dissolved oxygen concentration and decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions. At

the downstream site ***(C-070)***, aquatic life uses are fully supported; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Red Bank Creek - There are three SCDHEC monitoring stations along Red Bank Creek. At the upstream site ***(C-580)***, aquatic life uses are fully supported based on macroinvertebrate community data. At the midstream site ***(C-066)***, aquatic life and recreational uses are fully supported. A significant decreasing trend in turbidity suggests improving conditions for this parameter. At the downstream site ***(C-067)***, aquatic life uses are fully supported. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Second Creek (C-583) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Savana Branch (C-061) – Aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

Lake Caroline (C-025) – Lake Caroline is located along Sixmile Creek. Aquatic life uses are fully supported. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are not supported due to fecal coliform bacteria excursions.

Sixmile Creek (C-005) – Aquatic life uses are partially supported due to dissolved oxygen excursions. Recreational uses are partially supported due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

Natural Swimming Areas

FACILITY NAME ***RECEIVING STREAM***	***PERMIT #*** ***STATUS***
CONGAREE GIRL SCOUT CAMP WEST FORK	32-N05 ACTIVE
YMCA LEXINGTON CAMP RED BANK CREEK TRIBUTARY	32-N10 ACTIVE
BETHYL CHRISTIAN CAMP FIRST CREEK	32-N01-1 ACTIVE

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-042	GB	MIDDENDORF	HIDDEN VALLEY

All water samples collected from ambient monitoring well ***AMB-042*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME*	*NPDES#* *TYPE*
CONGAREE CREEK MARTIN MARIETTA AGGREGATES/CAYCE QUARRY	SCG730263 MINOR INDUSTRIAL
FIRST CREEK CWS/GLENN VILLAGE II SD	SC0030651 MINOR DOMESTIC
FIRST CREEK TRIBUTARY COLUMBIA SILICA/DIXIANA MINE	SCG730051 MINOR INDUSTRIAL
BEAR CREEK LEXINGTON COUNTY/EDMUND LANDFILL	SC0045110 MINOR INDUSTRIAL
SIXMILE CREEK SOLAR FARMS, INC.	SC0039021 MINOR INDUSTRIAL
SIXMILE CREEK SHANDON TERRACE/PARKWOOD MHP	SC0030473 MINOR DOMESTIC
SIXMILE CREEK TRIBUTARY MARTIN MARIETTA/CAYCE QUARRY	SCG730263 MINOR INDUSTRIAL
SCOUTER BRANCH TRIBUTARY COLUMBIA SILICA/TINDAL MINE	SCG730449 MINOR INDUSTRIAL
SCOUTER BRANCH TRIBUTARY B&T SAND/EDMUND MINE	SCG730582 MINOR INDUSTRIAL
SECOND CREEK COLUMBIA SILICA/PRINCETON MINE	SCG730450 MINOR INDUSTRIAL
SECOND CREEK TRIBUTARY US SILICA CO./COLUMBIA MINE	SCG730700 MINOR INDUSTRIAL
CONGAREE CREEK TRIBUTARY HANSON BRICK EAST/SOX PIT	SCG730501 MINOR INDUSTRIAL
CONGAREE CREEK TRIBUTARY EAGLE CONSTRUCTION/MALPHRUS PIT MINE	SCG731166 MINOR INDUSTRIAL
RED BANK CREEK B&T SAND/NAZARETH MINE	SCG730584 MINOR INDUSTRIAL

RED BANK CREEK TRIBUTARY	SCG731061
LONG POND PROPERTIES, LLC/HIDDEN SPRINGS MINE	MINOR INDUSTRIAL
RED BANK CREEK TRIBUTARY	SCG730581
B&T SAND/BLEDSOE MINE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	
CONGAREE CREEK	SCR036301
CITY OF CAYCE	PHASE II
CITY OF CAYCE	SMALL MS4
LEXINGTON COUNTY	
CONGAREE CREEK	SCR036305
TOWN OF PINE RIDGE	PHASE II
TOWN OF PINE RIDGE	SMALL MS4
LEXINGTON COUNTY	
CONGAREE CREEK	SCR036306
TOWN OF SOUTH CONGAREE	PHASE II
TOWN OF SOUTH CONGAREE	SMALL MS4
LEXINGTON COUNTY	
CONGAREE CREEK	SCR036307
TOWN OF SPRINGDALE	PHASE II
TOWN OF SPRINGDALE	SMALL MS4
LEXINGTON COUNTY	
CONGAREE CREEK	SCR036304
UNINCORPORATED AREAS	PHASE II
LEXINGTON COUNTY	SMALL MS4
LEXINGTON COUNTY	
CONGAREE CREEK	SCR036308
CITY OF WEST COLUMBIA	PHASE II
CITY OF WEST COLUMBIA	SMALL MS4
LEXINGTON COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
LEXINGTON COUNTY TRANSFER STATION	321001-6001
DOMESTIC	ACTIVE
LEXINGTON COUNTY LANDFILL	321001-1201
C&D	ACTIVE

12TH ST. EXTENTION LANDFILL	322902-1301
C&D	INACTIVE
SOX & SONS C&D LANDFILL	322902-1301
C&D	INACTIVE
SOX & SONS CONSTRUCTION CO.	322613-1701
C&D	ACTIVE
SOX & SONS LAND CLEARING	322902-1701
C&D	INACTIVE
CAROLINA MATERIALS CORP. C&D LF	322611-1201
C&D	ACTIVE
CAROLINA MATERIALS CORP. C&D/LCD LF	322611-1201
SWP C&D	INACTIVE
CAROLINA MATERIALS CORP. WOOD WASTE PROC. FAC.	322611-3001
COMPOSTING	ACTIVE
OWEN ELECTRICAL STEEL CO.	----------
INDUSTRIAL	INACTIVE
RED BANK DUMP	----------
DOMESTIC	CLOSED
U.S. #1 FLEA MARKET COMPOSTING	322447-3001
COMPOSTING	CLOSED
U.S. #1 FLEA MARKET INERT LANDFILL	322447-1201
INDUSTRIAL	CLOSED
LEXINGTON COUNTY/EDMUND C&D & LCD LANDFILL	321001-1201
C&D	ACTIVE
LEXINGTON COUNTY/EDMUND C&D LANDFILL	321001-1202
C&D	ACTIVE
LEXINGTON COUNTY/EDMUND FACILITY	321001-1101
MUNICIPAL	INACTIVE
S&T RECYCLING, LLC C&D LANDFILL	322456-1203
C&D	ACTIVE
S&T EXCAVATING WOOD CHIPPING FACILITY	322456-3003
COMPOSTING	ACTIVE
PENNSYLVANIA GLASS SAND CORP.	----------
INDUSTRIAL	INACTIVE

Land Applications

LAND APPLICATION FACILITY NAME	*PERMIT # TYPE*
SPRAYFIELD/TILEFIELD WINDY HILL WWTP	ND0067075 DOMESTIC

Mining Activities

MINING COMPANY MINE NAME	*PERMIT # MINERAL*
MARTIN MARIETTA MATERIALS, INC. CAYCE QUARRY	0102-63 GRANITE
RICHTEX CORPORATION SOX MINE	0184-63 KAOLIN
B&T SAND COMPANY, INC. BLEDSOE MINE	0947-63 SAND
CAROLINA MATERIALS CORPORATION RED BANK PIT	0608-63 SAND, SAND/CLAY
B&T SAND COMPANY, INC. EDMUND MINE	0958-63 SAND
COLUMBIA SILICA SAND, INC. TINDAL MINE	0535-63 SAND
US SILICA CO. COLUMBIA MINE	0150-63 SAND
COLUMBIA SILICA SAND, INC. SHULER MINE #2	0010-63 SAND
B&T SAND COMPANY, INC. NAZARETH MINE	1211-63 SAND/CLAY
WILSON BROTHERS SMITH MINE	0934-63 SAND
FOSTER-DIXIANA SAND COMPANY GASTON MINE	1139-63 SAND
COLUMBIA SILICA SAND, INC. TRUCK PIT	0009-63 SAND
TRISTAR LAND CO. BELO ROAD SAND MINE	1589-63 SAND CLAY/SOIL
TCJW, LLC TCJW MINE	1709-63 SAND, TOP

Growth Potential

There is a high potential for growth in this watershed, which contains the Towns of Red Bank, South Congaree, Pineridge, Springdale, Oak Grove, and portions of the Cities of Cayce and West Columbia. The growth is primarily in the form of commercial and residential uses. Expansion of the industrial base is also expected. There are several major highways bisecting the watershed, together with the Columbia Metropolitan Airport and a rail line to aid transportation related growth. Water is available in the urbanized areas and can be easily extended by the Cities of West Columbia and Cayce; however, sewer is not widely available and will require a major investment. Two Notch Road and Old Barnwell wastewater treatment plants (WWTP), under Lexington County Joint Municipal Water and Sewer Commission, have been eliminated in accordance with the §208 Regional Water Quality Management Plan, with effluent transported to the City of Cayce's WWTP. The construction of the line to Cayce and the planned expansion of the Cayce Plant to 25 million gpd has and will continue to make regional sewer service more readily available in this portion of Lexington County.

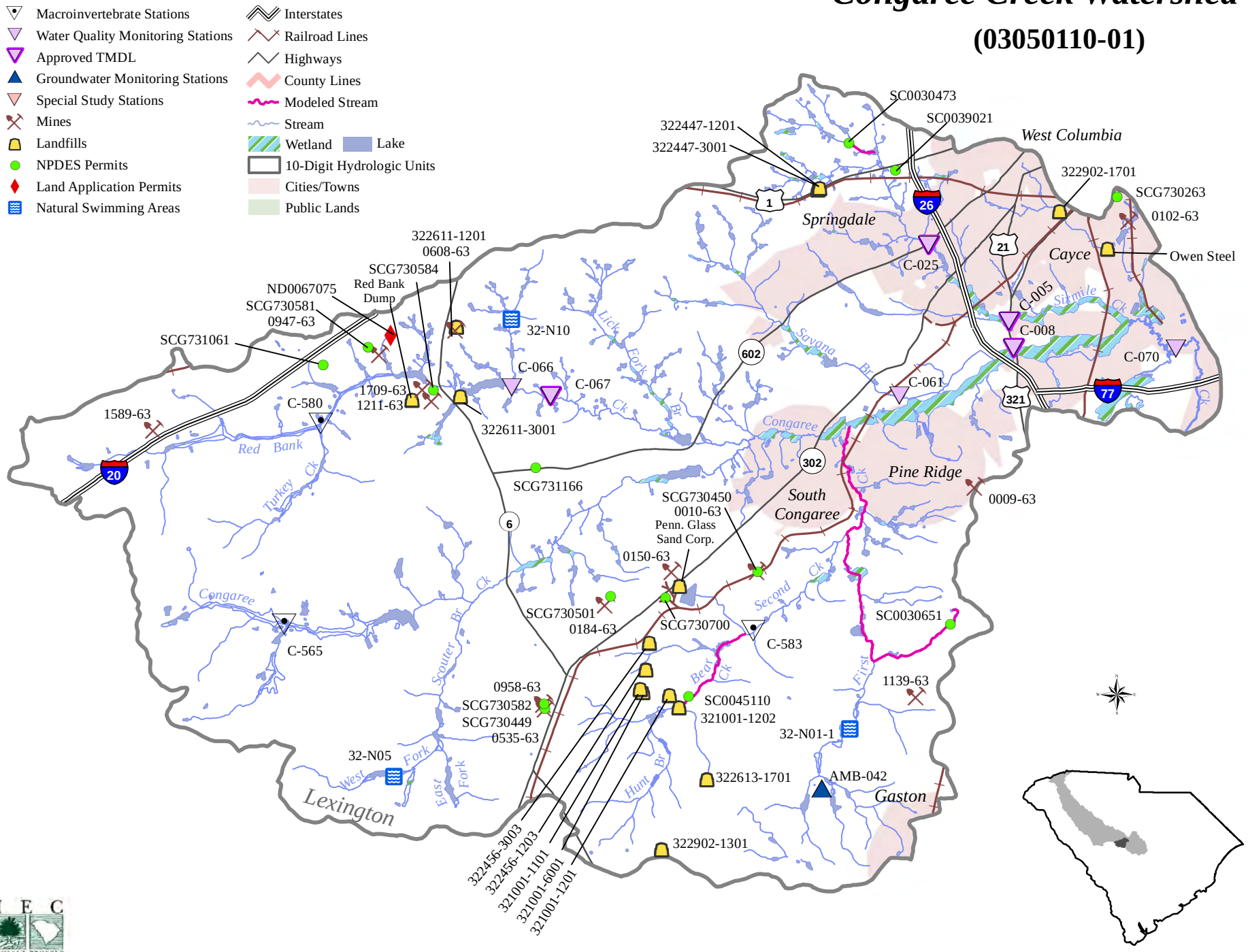
Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for **Congaree Creek** and its tributaries **Sixmile Creek** and **Red Bank Creek** at water quality monitoring sites C-005, C-008, C-025, and C-067. The TMDLs determine the maximum amount of fecal coliform bacteria these streams can receive and still meet water quality standards. There were six NPDES facilities permitted to discharge fecal coliform bacteria in the Congaree Creek watershed. Much of the watershed has been designated as part of one or more small MS4s. Possible sources of fecal coliform bacteria in this watershed are failing septic systems, leaking sewers, sanitary sewer overflows, agricultural runoff, cattle-in-streams, and urban (MS4 and non-MS4) runoff. The TMDLs require reductions of 27% to 54% in fecal coliform loading for this stream to meet the recreational use standard.

Congaree Creek Watershed

(03050110-01)



D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

03050110-02

(Gills Creek)

General Description

Watershed 03050110-02 (formerly 03050110-030) is located in Richland County and consists primarily of ***Gills Creek*** and its tributaries. The watershed occupies 47,683 acres of the Sandhills region of South Carolina. Land use/land cover in the watershed includes: 51.0% urban land, 25.1% forested land, 13.4% agricultural land, 8.1% forested wetland (swamp), 2.1% water, and 0.3% nonforested wetland (marsh).

Gills Creek flows through the northeastern section of the City of Columbia and drains into the Congaree River. Gills Creek originates near Sesquicentennial State Park and accepts the drainage of Bynum Creek (Rose Creek), Rowell Creek, and Mack Creek before flowing through Rockyford Lake and Forest Lake. Jackson Creek also originates near Sesquicentennial State Park and flows through Sesquicentennial Pond and Windsor Lake before accepting the drainage of Little Jackson Creek (Lightwood Knot Branch). Jackson Creek then flows through Carys Lakes (Arcadia Lakes) and Spring Lake before flowing into Gills Creek in Forest Lake. Downstream of Forest Lake, Gills Creek accepts the drainage of Eightmile Branch and Pen Branch (Orphanage Branch) before flowing through Lake Katherine. Wildcat Creek (Semmes Lake, Fork Creek, Upper Legion Lake, Lower Legion Lake) drains into Gills Creek downstream of Lake Katherine. Gills Creek and its associated wetlands drain into the Congaree River. Several oxbow lakes, including Alligator Lake, drain into Gills Creek near the river. There are a total of 117.5 stream miles and 1,120.0 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
C-068	W	FW	FOREST LAKE AT DAM
C-001	W	FW	GILLS CREEK AT BRIDGE ON US 76 (GARNERS FERRY ROAD)
C-017	INT	FW	GILLS CREEK AT SC 48 (BLUFF ROAD)

Forest Lake (C-068) – Aquatic life and recreational uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter.

Gills Creek - There are two SCDHEC monitoring stations along Gills Creek. Aquatic life uses are fully supported at the upstream site ***(C-001)***; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. Aquatic life uses are partially

supported at the downstream site (***C-017)*** due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and total suspended solids suggest improving conditions for these parameters. Recreational uses are not supported 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 SCDHEC for mercury and includes Sesquicentennial State Park Lake, Carys Lake, Forest Lake, and Windsor Lake within this watershed (see advisory p.131).

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
SESQUICENTENIAL STATE PARK	40-N16
SESQUICENTENIAL STATE PARK LAKE	ACTIVE

Groundwater Quality

Well #	**Class**	**Aquifer**	**Location**
AMB-046	GB	MIDDENDORF	SPRING VALLEY

All water samples collected from ambient monitoring well ***AMB-046*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM	***NPDES#***
FACILITY NAME	***TYPE***
GILLS CREEK	SCG250180
CENTRAL PRODUCTS CO. DBA IPG	MINOR INDUSTRIAL
JACKSON CREEK	SC0046264
AMPHENOL CORP.	MINOR INDUSTRIAL
GILLS CREEK TRIBUTARY	SCG730269
JORDAN CO./CONGAREE SAND PIT	MINOR INDUSTRIAL
LIGHTWOOD KNOT BRANCH TRIBUTARY	SCG730926
SCDOT/I-20 PIT	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM	***NPDES#***
MUNICIPALITY	***MS4 PHASE***
RESPONSIBLE PARTY	***MS4 SIZE***
IMPLEMENTING PARTY	
GILLS CREEK	SCS400001
----------	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	
GILLS CREEK	SCS790001
CITY OF COLUMBIA	PHASE II
CITY OF COLUMBIA	SMALL MS4
CITY OF COLUMBIA	
GILLS CREEK	SCR037901
CITY OF COLUMBIA	PHASE II
FORT JACKSON	SMALL MS4
FORT JACKSON	
GILLS CREEK	SCS400001
CITY OF ARCADIA LAKES	PHASE II
RICHLAND COUNTY	SMALL MS4
RICHLAND COUNTY	
GILLS CREEK	SCS400001
CITY OF FOREST ACRES	PHASE II
RICHLAND COUNTY	SMALL MS4
RICHLAND COUNTY	
GILLS CREEK	SCS400001
UNINCORPORATED AREAS	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***
FACILITY TYPE	***STATUS***
ANCHOR CONTINENTAL, INC.	----------
INDUSTRIAL	CLOSED
ANCHOR CONTINENTAL, INC.	----------
INDUSTRIAL	CLOSED
INTERTAPE POLYMER GROUP (ANCHOR CONTINENTAL)	403326-1601
INDUSTRIAL	ACTIVE
BALDWIN ROAD C&D DUMP	----------
C&D LANDFILL	CLOSED

COLUMBIA LANDFILL	----------
MUNICIPAL	INACTIVE
CITY OF COLUMBIA COMPOSTING FACILITY	401002-3001
COMPOSTING	ACTIVE
TRAPP L/C DEBRIS & YT LANDFILL	402468-1701
C&D LANDFILL	INACTIVE

Mining Activities

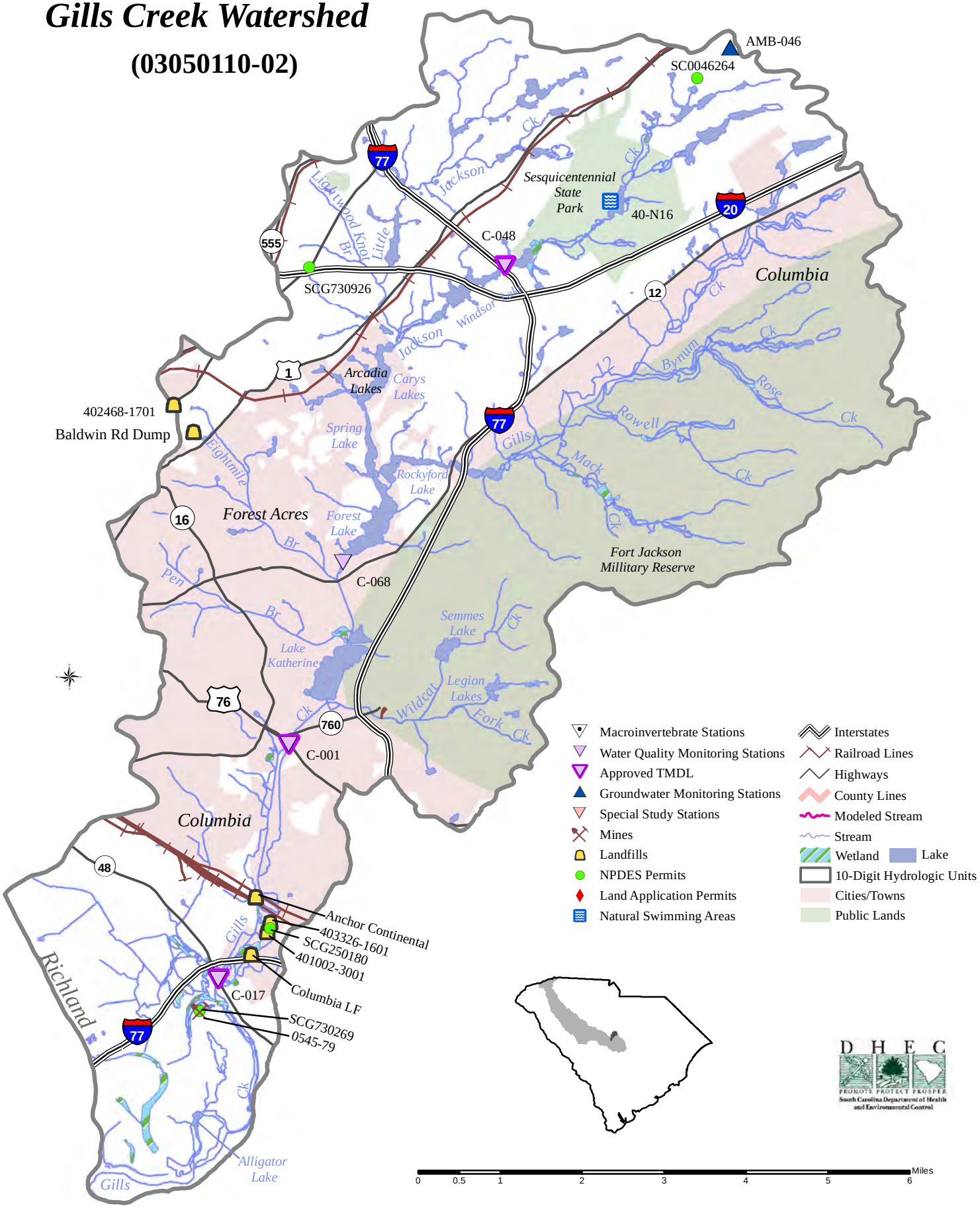
MINING COMPANY	***PERMIT #***
MINE NAME	***MINERAL***
THE JORDAN COMPANY	0545-79
CONGAREE SAND PIT	SAND

Growth Potential

There is a high potential for continued growth in this urban watershed, which contains a portion of the City of Columbia. Although primarily residential, there are a substantial number of commercial and industrial areas. Almost the entire watershed, which runs through the City of Columbia, has water and sewer readily available. Growth has been steady in the Southeast Columbia area along the I-77 beltway and is expected to continue to be a strong growth corridor for residential and industrial development.

Gills Creek Watershed

(03050110-02)



03050110-03

(Congaree River)

General Description

Watershed 03050110-03 (formerly 03050110-010, 040, 050) is located in Richland, Lexington, and Calhoun Counties and consists primarily of the ***Congaree River*** and its tributaries from its origin to Cedar Creek. The watershed occupies 232,276 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 35.8% forested land, 27.0% agricultural land, 24.4% forested wetland (swamp), 10.9% urban land, 1.5% water, 0.4% nonforested wetland (marsh), and 0.2% barren land.

The Congaree River originates with the confluence of the Saluda River Basin and the Broad River Basin in the City of Columbia. The Broad River Canal and Rocky Branch flow into the Congaree River within the City of Columbia, followed by the Congaree Creek watershed, the Gills Creek watershed, Toms Branch (Silver Lake, Geiger Pond), Big Lake (Cow Cut), and Savany Hunt Creek. The river then accepts drainage from Sandy Run (Little Sandy Run), Mill Creek (Twin Lakes, Sun View Lake, Ulmers Pond, Pinewood Lake, Adams Pond, Reeder Point Branch, Black Lake), Saylors Lake, Dead River, Muellers Little Lake, and Muellers Big Lake. Big Beaver Creek accepts drainage from Rock Branch, Branham Branch, Little Beaver Creek (Howell Branch, Falls Branch), and Congaree Spring Branch (Hildebrand Branch) before flowing into the Congaree River. Butlers Gut Creek (Buyck Bottom Creek, Sikes Creek) connects Big Beaver Creek to the river. Bates Mill Creek (High Hill Creek, Speigner Branch, Dicks Swamp, Lords Lake) and Cedar Creek drain into the river at the base of the watershed. The headwaters of Cedar Creek flow through Westons Pond, then Harmons Pond, Morrells Pond, Clarkson Pond, and Duffies Pond before accepting the drainage of Reeves Branch and Myers Creek (Cabin Branch, Horsepen Branch, Goose Branch). After the confluence with Myers Creek, Cedar Creek flows through Wise Lake and Weston Lake and accepts drainage from Dry Branch before entering the Congaree River. There are numerous river oxbows and short stream segments that braid between Cedar Creek and the Congaree River including Horsepen Gut, Running Gut, Old Dead River Lake, Thorntree Gut, Boggy Gut, Deep Jackson Gut, and Hammond Gut.

The lower section of the watershed contains a large portion of the Congaree National Park, a floodplain forest with the largest contiguous tract of old-growth bottomland hardwoods in the United States. There are a total of 642.4 stream miles and 2,271.8 acres of lake waters in this watershed, all classified FW except within the Congaree National Park. Within the 2006 boundary of the Congaree National Park, all streams are classified ORW, with the exception of the reach of Cedar Creek from Wise Lake to the Congaree River, which is classified ONRW (Outstanding National Resource Waters). The park boundary has expanded since 2006, and the classifications of those waters within the expanded boundary will be reevaluated by SCDHEC, but are currently classified FW.

Surface Water Quality

Station #	Type	Class	Description
B-080	W	FW	Broad River Diversion Canal at Columbia Water Plant
CSB-001L	W/SSS	FW	Congaree River at Blossom St (Saluda River)
CSB-001R	W/SSS	FW	Congaree River at Blossom St (Broad River)
S-955	SSS	FW	Congaree River at Rosewood Drive Landing
S-956	SSS	FW	Congaree River at Cayce WWTP Outfall
S-957	SSS	FW	Congaree River at Columbia Metro WWTP Outfall
S-958	SSS	FW	Congaree River at East Richland WWTP Outfall
S-994	SSS	FW	Congaree River upstream of Congaree Creek
S-959	SSS	FW	Congaree River at Congaree Creek Mouth
S-960	SSS	FW	Congaree River at Gills Creek Mouth
S-961	SSS	FW	Congaree River at Toms Branch Mouth
S-995	SSS	FW	Congaree River, midway between Dak Americas Intake and Outfall
S-996	SSS	FW	Congaree River, small bend in river upstr of Westinghouse Outfall
S-965	SSS	FW	Congaree River at Westinghouse Industries Outfall
C-009	INT/BIO	FW	Sandy Run at U.S. 176
S-971	SSS	FW	Sandy Run at confluence with Congaree River
C-073	W	FW	Reeder Point Branch at SC 48
C-021	W	FW	Mill Creek at SC 262
S-967	SSS	FW	Congaree River at Devro-Teepak Outfall
C-074	INT	FW	Congaree River -W boundary of Congaree National Park
C-010	BIO	FW	Big Beaver Creek at US 176
C-069	SEDM/BIO	FW	Cedar Creek at S-40-66
C-071	BIO	FW	Cedar Creek at S-40-734
C-075	INT	FW	Cedar Creek S of S-40-734 at old USGS gaging platform

Broad River Diversion Canal – Aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Congaree River - There are fifteen SCDHEC monitoring stations along this section of the Congaree River. At special study sites ***S-956, S-957, S-958, S-959, S-960, S-961***, **S-965,** and **S-967** the aquatic life use data is limited to copper data. Based on that data, all the above sites except S-967 meet the criteria for copper and support the standards. Special study site ***S-967*** does not meet those copper standards. Only fecal coliform was sampled at special study sites ***CSB-001R, CSB-001L, S-955, S-994, S-995,*** and ***S-996.*** At CSB-001R and CSB-001L (stationed along the right and left banks of the headwaters of the Congaree River), recreational uses are partially supported due to fecal coliform bacteria excursions; however, significant decreasing trends in fecal coliform bacteria concentration suggest improving conditions for this parameter. All the remaining downstream special study sites fully support recreational uses. At the furthest downstream site ***(C-074)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a decreasing trend in dissolved oxygen concentration. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Sandy Run – There are two SCDHEC monitoring stations along Sandy Run. This is a blackwater system, characterized by naturally low pH conditions. At the upstream site ***(C-009)***, aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. The downstream site ***(S-971)*** is a special study site with aquatic life use data limited to copper data. Based on that data, the S-971 meets the criteria for copper and supports the standards.

Reeder Point Branch (C-073) – Aquatic life uses are fully supported. There is a significant increasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Mill Creek - Aquatic life uses are fully supported. 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. Significant decreasing trends in total phosphorus concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Big Beaver Creek (C-010) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Cedar Creek – There are three SCDHEC monitoring stations along Cedar Creek. This is a blackwater system, characterized by naturally low pH conditions. At the upstream site ***(C-069)***, aquatic life uses are fully supported based on macroinvertebrate community data. A significant decreasing trend in turbidity suggests improving conditions for this parameter. At the midstream site ***(C-071)***, aquatic life uses are partially supported based on macroinvertebrate community data. Aquatic life and recreational uses are fully supported at the downstream site ***(C-075)***; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in turbidity suggests improving conditions for this parameter.

A fish consumption advisory has been issued by SCDHEC for mercury and includes portions of streams within this watershed (see advisory p.131).

Natural Swimming Areas

FACILITY NAME / *RECEIVING STREAM*	*PERMIT # / STATUS*
BOZARDS POND	09-N03
HIGH HILL CREEK	ACTIVE

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-045	GB	MIDDENDORF	FT. JACKSON
AMB-047	GB	MIDDENDORF	HOPKINS

All water samples collected from ambient monitoring wells ***AMB-045*** and ***AMB-047*** met standards for Class GB groundwater.

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / *FACILITY NAME*	*NPDES# / TYPE*
CONGAREE RIVER DAK AMERICAS LLC	SC0001333 MAJOR INDUSTRIAL
CONGAREE RIVER WESTINGHOUSE ELECTRIC LLC/COLUMBIA	SC0001848 MAJOR INDUSTRIAL
CONGAREE RIVER SCE&G/COLUMBIA HYDRO PLANT	SC0002062 MINOR INDUSTRIAL
CONGAREE RIVER CITY OF COLUMBIA/METRO PLANT	SC0020940 MAJOR DOMESTIC
CONGAREE RIVER CITY OF CAYCE WWTP	SC0024147 MAJOR DOMESTIC
CONGAREE RIVER DEVRO INC./CORIA DIV.	SC0033367 MINOR INDUSTRIAL
CONGAREE RIVER EAST RICHLAND COUNTY PSD/GILLS CREEK PLANT	SC0038865 MAJOR DOMESTIC
CONGAREE RIVER CITY OF WEST COLUMBIA WTP	SCG641005 MINOR DOMESTIC
CONGAREE RIVER SC DEPT. AGRIC. CALIBRATION STATION	SC0041386 MINOR INDUSTRIAL
CONGAREE RIVER COLUMBIA SILICA/DIXIANA MINE	SCG730451 MINOR INDUSTRIAL
DRY CREEK BROOKFOREST MOBILE HOME ESTATES	SC0031178 MINOR DOMESTIC

DRY CREEK TRIBUTARY BELLE MEADE SD	SC0030988 MINOR DOMESTIC
DRY CREEK TRIBUTARY PINEY GROVE UTILITIES/LLOYDWOOD SD	SC0031402 MINOR DOMESTIC
ROCKY BRANCH VULCAN CONSTR. MATERIALS CO./COLUMBIA QUARRY	SCG730054 MINOR INDUSTRIAL
TOMS BRANCH TCH PROPERTIES LLC	SC0031321 MINOR DOMESTIC
TOMS BRANCH ROLLING MEADOWS MHP/HERITAGE	SC0033685 MINOR DOMESTIC
SAVANY HUNT CREEK SC DEPT OF TRANS./I-26 REST AREA	SC0040339 MINOR DOMESTIC
CEDAR CREEK SC AIR NATL. GUARD/MCENTIRE AB	SC0000701 MINOR INDUSTRIAL
CEDAR CREEK CEDAR CREEK MHP	SC0032018 MINOR DOMESTIC
CEDAR CREEK TRIBUTARY RICHLAND DISTRICT I/GADSDEN ELEM.	SC0031526 MINOR DOMESTIC
CABIN BRANCH PINEY GROVE UTILITIES/FRANKLIN PARK SD	SC0031399 MINOR DOMESTIC
CABIN BRANCH TRIBUTARY RICHLAND DISTRICT I/HOPKINS JR HIGH	SC0031500 MINOR DOMESTIC
HORSEPEN BRANCH RICHLAND DISTRICT I/HOPKINS ELEM. SCHOOL	SC0031496 MINOR DOMESTIC
TOMS BRANCH 2 COR LLC/HWY 321 SAND MINE	SCG731018 MINOR INDUSTRIAL
TOMS BRANCH TRIBUTARY LANIER CONSTRUCTION/LANIER MINE	SCG731091 MINOR INDUSTRIAL
TOMS BRANCH TRIBUTARY LANIER CONSTRUCTION/STROUD MINE	SCG731092 MINOR INDUSTRIAL
MILL CREEK FT JACKSON MINE	SCG731156 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM / ***MUNICIPALITY*** / ***RESPONSIBLE PARTY*** / ***IMPLEMENTING PARTY***	***NPDES#*** / ***MS4 PHASE*** / ***MS4 SIZE***
CEDAR CREEK ---------- RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE I MEDIUM MS4
CEDAR CREEK CITY OF COLUMBIA CITY OF COLUMBIA CITY OF COLUMBIA	SCS790001 PHASE I MEDIUM MS4
CEDAR CREEK CITY OF COLUMBIA FT. JACKSON FT. JACKSON	SCR037901 PHASE II SMALL MS4
CEDAR CREEK CITY OF CAYCE CITY OF CAYCE LEXINGTON COUNTY	SCR036301 PHASE II SMALL MS4
CEDAR CREEK UNINCORPORATED AREAS LEXINGTON COUNTY LEXINGTON COUNTY	SCR036304 PHASE II SMALL MS4
CEDAR CREEK CITY OF WEST COLUMBIA CITY OF WEST COLUMBIA LEXINGTON COUNTY	SCR036308 PHASE II SMALL MS4
CEDAR CREEK UNINCORPORATED AREAS RICHLAND COUNTY RICHLAND COUNTY	SCS400001 PHASE I MEDIUM MS4

Nonpoint Source Permitted Activities

Land Disposal Activities

Landfill Facilities

LANDFILL NAME / ***FACILITY TYPE***	***PERMIT #*** / ***STATUS***
FORT JACKSON INERT LF --------	---------- CLOSED
FORT JACKSON SANITARY LF DOMESTIC	405802-1101 CLOSED

FORT JACKSON COMPOST SITE COMPOST		405802-3001 ACTIVE
FORT JACKSON SANITARY LF DOMESTIC		405001-1101 CLOSED
HUGER STREET DUMP DOMESTIC		---------- CLOSED
HEMLOCK ROAD DUMP DOMESTIC		---------- CLOSED
STADIUM ROAD DUMP DOMESTIC		---------- CLOSED
ROSEWOOD DRIVE DUMP DOMESTIC		---------- CLOSED
SOUTHEAST CONCRETE LANDFILL INDUSTRIAL		323335-1601 INACTIVE
SOUTHEAST CONCRETE LANDFILL INDUSTRIAL		322448-1601 INACTIVE
SOUTHEAST CONCRETE LANDFILL INDUSTRIAL		---------- INACTIVE
TAYLOR BROTHERS C&D DUMP C&D		---------- INACTIVE
LEXINGTON COUNTY LANDFILL #1 DOMESTIC		---------- CLOSED
GASTON DUMP DOMESTIC		---------- CLOSED
DAK AMERICAS LLC LF INDUSTRIAL		092432-1601 ACTIVE
DAK AMERICAS LLC LF C&D	-	093322-1901 ACTIVE
CALHOUN COUNTY C&D & LCD LANDFILL C&D		091001-1201 ACTIVE
CALHOUN COUNTY MSW LANDFILL DOMESTIC		091001-1101 INACTIVE
CALHOUN COUNTY SANITARY LANDFILL DOMESTIC		---------- INACTIVE
REGULATORY SOLUTIONS INC. PROCESSING FACILITY INDUSTRIAL		092622-2001 ACTIVE

Land Applications

LAND APPLICATION FACILITY NAME	*PERMIT # TYPE*
SLUDGE INJECTION BIO TECH, INC.	ND0069761 DOMESTIC
SPRAYFIELD MANCHESTER FARMS	ND0068969 INDUSTRIAL

Mining Activities

MINING COMPANY MINE NAME	*PERMIT # MINERAL*
LANIER CONSTRUCTION CO., INC. LANIER ASPHALT PLANT	0124-63 SAND
LANIER CONSTRUCTION CO., INC. STROUD MINE	0946-63 SAND
FOSTER-DIXIANA CORP. SILICA PIT	0141-63 SAND
VULCAN CONSTR. MATERIALS CO. COLUMBIA QUARRY	0133-79 GRANITE
B&T SAND CO., INC. CALHOUN COUNTY SAND MINE	1653-63 SAND/CLAY

Water Quantity

WATER USER STREAM	*REGULATED CAPACITY (MGD) PUMPING CAPACITY (MGD)*
CITY OF CAYCE CONGAREE RIVER	24.0 14.4
CITY OF COLUMBIA BROAD RIVER CANAL	91.0 71.0

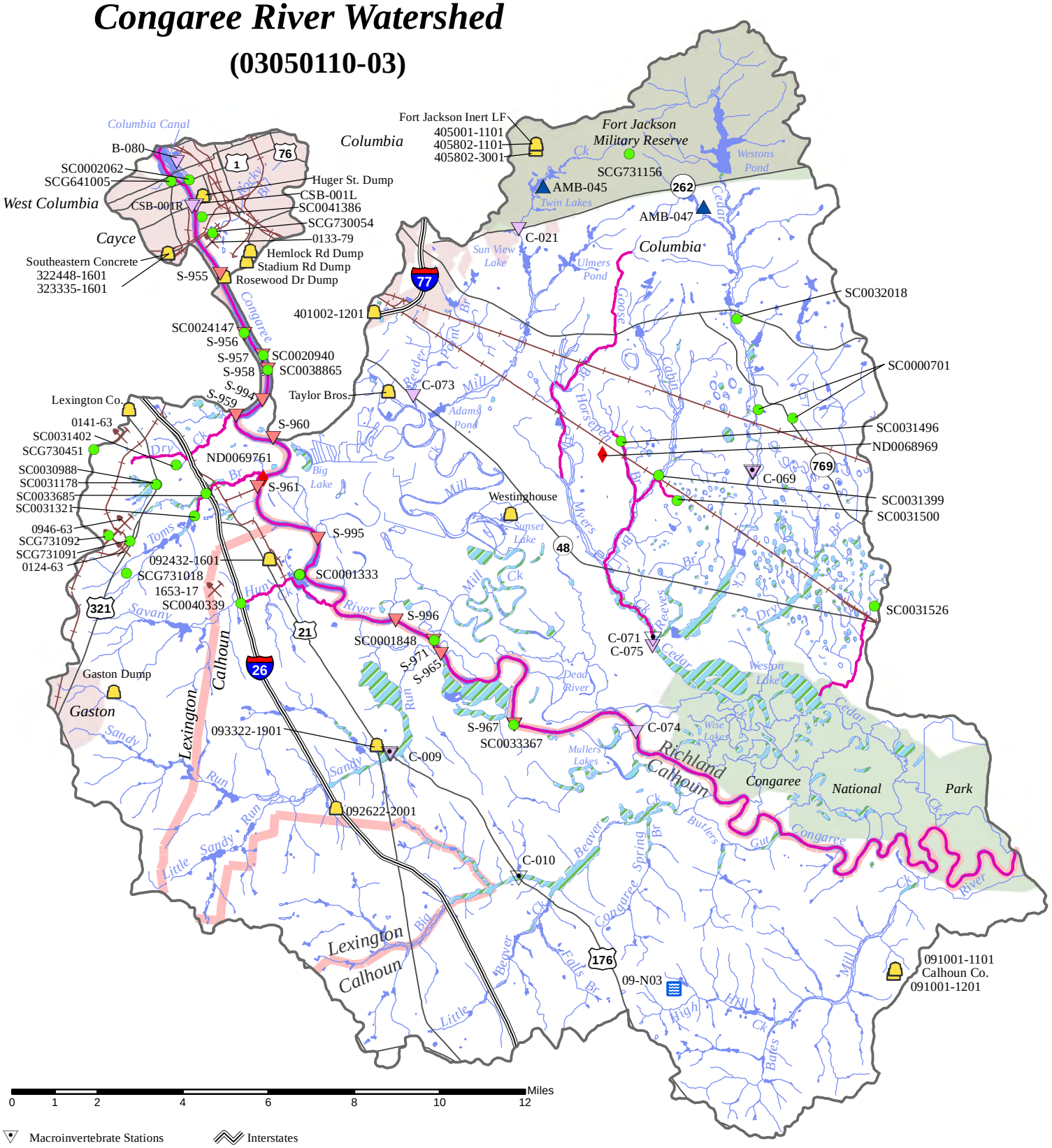
Growth Potential

There is an overall high potential for growth in this watershed, which contains a portion of the City of Columbia. With the Innovista Development Plans in place there is a high potential for continued residential, commercial, and industrial growth in the Vista and Olympia districts of Columbia. The continued expansion of the Three Rivers Greenway will increase recreational use in this area. Growth is also projected along the I-77 beltway around the city. The Olympia and Bluff Road areas contain heavy industrial development. Only the upper portion of the watershed, near the City of Columbia, has available water and sewer service. The City of Columbia has installed an effluent diffuser in the Congaree River to improve dilution of the treated effluent. Richland County has plans to extend sewer service along the US 378 corridor between Columbia and Eastover, which could provide an impetus for growth in the unincorporated portions of lower Richland County.

The Cities of West Columbia and Cayce are also located in this watershed. The planned expansion of the Cayce WWTP will allow for continued residential, commercial, and industrial development in this portion of the watershed. The area around Silver Lake is expected to undergo substantial residential and industrial development. The area south of the City of Cayce, along I-26 and US 321 are expected to experience continued growth following the relocation of SCE&G from downtown Columbia and the development of the State Farmers Market. The Bluff Road/Shop Road areas in Columbia are expected to experience continued growth with additional University of South Carolina oriented residential development and new industrial, office development. The area along US 176 and US 21 should experience moderate growth, primarily industrial.

Congaree River Watershed

(03050110-03)



03050110-04

(Congaree River)

General Description

Watershed 03050110-04 (formerly 03050110-060, 070) is located in Richland and Calhoun Counties and consists primarily of the lowest reach of the ***Congaree River*** and its tributaries from Toms Creek to its confluence with the Wateree River Basin. The watershed occupies 69,722 acres of the Upper Coastal Plain region of South Carolina. Land use/land cover in the watershed includes: 37.2% forested land, 32.4% agricultural land, 23.4% forested wetland (swamp), 5.8% urban land, 0.9% water, and 0.3% nonforested wetland (marsh).

Griffins Creek drains into Running Lake, which in turn flows through Little Lake, Big Lake, and into Running Creek. Running Creek drains into Singleton Creek, which flows through Bates Old River to reach the Congaree River. Buckhead Creek (True Blue Creek) enters the river further downstream, along with Toms Creek (Haithcock Pond, Westons Pond, Ray Branch, Drafts Pond, McKenzie Creek). The lower section of the Congaree National Park, a floodplain forest with the largest contiguous tract of old-growth bottomland hardwoods in the United States, lies within this watershed. There are a total of 207.2 stream miles and 410.1 acres of lake waters in this watershed, all classified FW except within the Congaree National Park. Within the 2006 boundary of the Congaree National Park, all streams are classified ORW. The park boundary has expanded since 2006, and the classifications of those waters within the expanded boundary will be reevaluated by SCDHEC, but are currently classified FW.

Surface Water Quality

Station #	Type	Class	Description
S-952	SSS	FW	TOMS CREEK AT CR 84
S-951	SSS	FW	TOMS CREEK AT UNPAVED CO. ROAD BETWEEN SR 1318 & SR 1322
C-072	INT	FW	TOMS CREEK AT SC 48
S-950	SSS/BIO	FW	TOMS CREEK AT RED BLUFF ROAD BETWEEN SR 1288 & SR 489
RS-04521	RS04/BIO	FW	BUCKHEAD CREEK AT S-09-151, 2.1 MI NE OF FORT MOTTE
C-007	INT	FW	CONGAREE RIVER AT US 601

Toms Creek - There are four SCDHEC monitoring stations along Toms Creek. The two most upstream sites ***(S-952, S-951)*** are special study sites and only sampled for fecal coliform. Both of these sites are fully supported for recreational uses. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred at next site downstream ***(C-072)***, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life uses at C-072 are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand and a decreasing trend in dissolved oxygen concentration. Recreational uses are partially supported due to fecal coliform bacteria excursions.

At the furthest downstream site ***(S-950)***, aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Buckhead Creek (RS-04521) - Aquatic life uses are partially supported based on macroinvertebrate community data. 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 fully supported.

Congaree River (C-007) – Aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life chronic criterion. In addition, there are significant increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. There is a significant increasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

A fish consumption advisory has been issued by SCDHEC for mercury and includes portions of streams within this watershed (see advisory p.131).

NPDES Permitted Activities

Active NPDES Facilities

RECEIVING STREAM / ***FACILITY NAME***	***NPDES#*** / ***TYPE***
CONGAREE RIVER	SCG731120
CHEROKEE INC./BELLEVILLE MINE	MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

RECEIVING STREAM / ***MUNICIPALITY*** / ***RESPONSIBLE PARTY*** / ***IMPLEMENTING PARTY***	***NPDES#*** / ***MS4 PHASE*** / ***MS4 SIZE***
TOMS CREEK	SCS400001
----------	PHASE I
RICHLAND COUNTY	MEDIUM MS4
RICHLAND COUNTY	

Nonpoint Source Permitted Activities

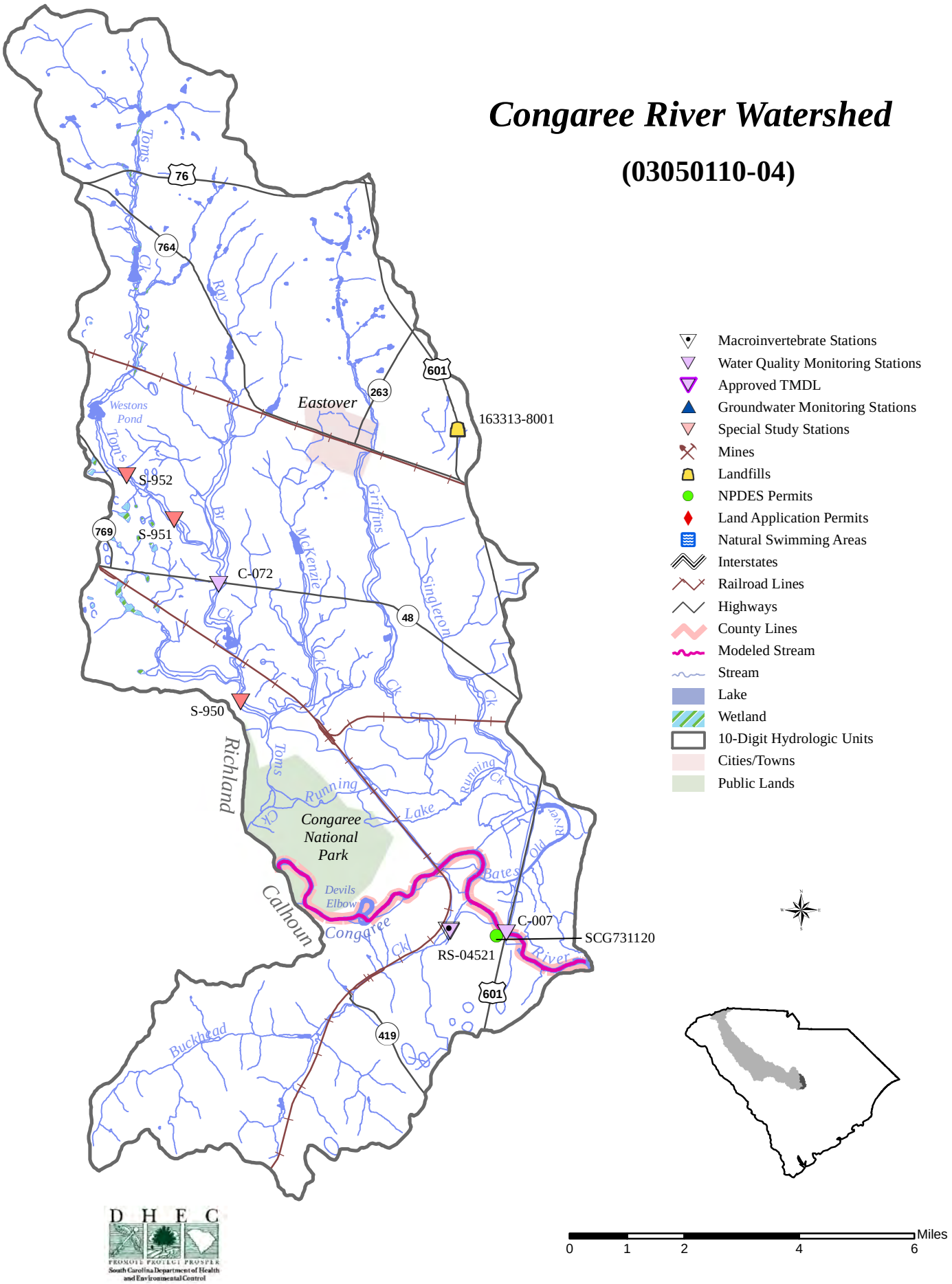
Land Disposal Activities

Landfill Facilities

LANDFILL NAME / ***FACILITY TYPE***	***PERMIT #*** / ***STATUS***
INTERNATIONAL PAPER	163313-8001
INDUSTRIAL	ACTIVE

Growth Potential

There is currently a low potential for growth in this watershed, which contains a portion of the Town of Eastover, although this could change if Richland County Utilities proceeds with plans to develop an interceptor line along US 378 tying into the Eastover WWTP on the Wateree River. The implementation of these plans could be the impetus for residential, commercial, and industrial growth that is currently prohibited due to the lack of infrastructure.


Congaree River Watershed
(03050110-04)
Macroinvertebrate Stations
Water Quality Monitoring Stations
Approved TMDL
Groundwater Monitoring Stations
Special Study Stations
Mines
Landfills
NPDES Permits
Land Application Permits
Natural Swimming Areas
Interstates
Railroad Lines
Highways
County Lines
Modeled Stream
Stream
Lake
Wetland
10-Digit Hydrologic Units
Cities/Towns
Public Lands
Toms
76
764
Ck
Ray
Ck
Westons
Pond
Toms
Br
S-952
S-951
769
C-072
Ck
Eastover
263
601
163313-8001
Griffins
McKenzie
Singleton
48
Ck
Ck
Ck
S-950
Richland
Toms
Running
Ck
Running
Ck
Lake
Congaree
National
Park
Old
River
Bates
Devils
Elbow
Congaree
Ck
C-007
SCG731120
RS-04521
River
601
419
Buckhead
Calhoun
Miles
0
1
2
4
6
D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

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APPENDIX A.

Saluda River Basin

Monitoring Site Descriptions

Ambient Water Quality Monitoring Sites

Station #	Type	Class	Description
03050109-01			
S-292 W		ORW	POINSETT RESERVOIR AT WATER INTAKE
S-088	W	FW/ORW N	ORTH SALUDA RIVER AT S-23-42, 5.2 MI NNW OF TIGERVILLE
S-773	BIO	FW	NORTH SALUDA RIVER AT U.S. 25
S-004	INT	FW	N. SALUDA R. AT BRIDGE ABOVE JUNC.W/SALUDA R. E OF SC 186
03050109-02			
S-291	W	ORW	TABLE ROCK RESERVOIR AT WATER INTAKE
S-320	W	TP GT	SOUTH SALUDA RIVER AT S-39-113 (TABLE ROCK ROAD)
S-086	BIO	FW	SOUTH SALUDA RIVER AT SC ROUTE 11
S-087	W	FW	SOUTH SALUDA RIVER AT S-23-101
RL-02307 RL02		FW	LAKE OOLENOY, SAMPLED FROM SOUTH SIDE OF SC 11 BRIDGE
S-798	W	FW	LAKE OOLENOY AT DRAIN NEAR SPILLWAY AT SC 11
RS-02330 RS02		FW	ADAMS CREEK AT UNPAVED RD FROM SC 8 AND END OF S-39-34
S-103	INT/BIO	FW	OOLENOY RIVER AT S-39-47
S-076	BIO	ORW	MIDDLE SALUDA RIVER AT JONES GAP STATE PARK
S-077	W	TN	MIDDLE SALUDA RIVER AT S-23-41
S-317	BIO	TN	OIL CAMP CREEK AT S-23-097
RS-04530 RS04/BIO		FW	MIDDLE SALUDA RIVER AT S-23-97
S-252	W	FW	MIDDLE SALUDA RIVER AT SC 288, 2.3 MILES WSW SLATER
S-980	BIO	FW	CARPENTER CREEK AT PACE BRIDGE RD NE OF SC 186/SC 135 INTERSECTION
S-299	INT	FW	SOUTH SALUDA RIVER AT SC 186
03050109-03			
S-991 BIO		FW	SHOAL CREEK AT DEER CREEK RD NE OF SC186/SC135 INTERSECTION
S-866 BIO		FW	SHOAL CREEK AT SR 140
S-250 W		FW	SALUDA LAKE AT FARR'S BRIDGE ON SC 183, 7MI NE OF EASLEY
S-314 W		FW	SALUDA LAKE, 0.5 MILES UPSTREAM OF LANDING
RL-03349 RL03		FW	SALUDA LAKE, 0.9 MI SE OF SC 183 IN SMALL ARM
RL-06427 RL06		FW	SALUDA LAKE, 0.7 MI N OF DAM
RL-05401 RL05		FW	SALUDA LAKE, 0.13 MI NE OF DAM
S-315 W		FW	MILL CREEK AT BENT BRIDGE ROAD, BELOW CAROLINA PLATING
S-005 W		FW	GEORGES CREEK TRIBUTARY AT S-39-192, 2.6 MILES NE OF EASLEY
RS-06151 RS06/BIO		FW	BURDINE CREEK AT BRIDGE ON S-39-192, 3 MILES NE OF EASLEY
S-865 BIO		FW	GEORGES CREEK AT ROAD ABOVE SR 36
S-300 INT		FW	GEORGES CREEK AT S-39-28
S-007 W		FW	SALUDA RIVER AT SC 81, SW OF GREENVILLE
S-301 INT/BIO		FW	BIG BRUSHY CREEK AT S-04-143
S-267 W		FW	SALUDA RIVER TRIB. 350 FT BELOW W. PELZER WWTP ON S-23-53
S-171 W		FW	GROVE CREEK BELOW JP STEVENS ESTES PLANT
S-774 BIO		FW	GROVE CREEK AT S-23-541
RS-02462 RS02/BIO		FW	GROVE CREEK AT S-23-52
S-119 INT		FW	SALUDA RIVER AT S-04-178, 3.2 MILES SE WILLIAMSTON
S-302	INT/BIO	FW	BIG CREEK AT S-04-116
03050109-04			
S-073 W		FW	REEDY R. AT UNNUMBERED ROAD OFF US 276, 3/4 MI. E OF TRAVELERS REST
S-265 BIO		FW	LANGSTON CREEK AT OLD BUNCOMB ROAD

Station #	Type	Class	Description
03050109-04 (continued)			
S-264	W	FW	LANGSTON CREEK AT SC 253
S-319	W	FW	REEDY RIVER AT RIVERS STREET, DOWNTOWN GREENVILLE
S-981	BIO	FW	RICHLAND CREEK AT E. NORTH STREET
S-067	W	FW	BRUSHY CREEK ON GREEN STREET EXT, BELOW DUNEAN MILL ON SC 20
S-867	BIO	FW	BRUSHY CREEK AT SR 30
S-139	BIO	FW	LAUREL CREEK AT MAULDIN ROAD
RS-06167	RS06/BIO	FW	REEDY RIVER TRIBUTARY IN THE PRESERVE AT PLANTERS ROW SD
S-323	SPRP	FW	REEDY RIVER AT S-23-316 3.5 MILES SSW OF MAULDIN
S-972	BIO	FW	BALDWIN CREEK AT MOORE ROAD
S-091	W/BIO	FW	ROCKY CREEK AT S-23-453, 3.5 MILES SW OF SIMPSONVILLE
S-833	BIO	FW	REEDY RIVER AT SR 542
S-982	BIO	FW	HARRISON CREEK AT S. HARRISON BRIDGE ROAD
S-072	INT	FW	REEDY RIVER ON HWY 418 AT FORK SHOALS
S-983	BIO	FW	HUFF CREEK AT GRIFFIN MILL ROAD
S-984	BIO	FW	BAKER CREEK TRIBUTARY AT ALVERSON ROAD
S-863	BIO	FW	HUFF CREEK AT SR 459
S-178	INT	FW	HUFF CREEK AT SC 418, 1.6 MI NW OF FORK SHOALS
S-985	BIO	FW	LITTLE CREEK AT BERRY ROAD
S-834	BIO	FW	REEDY RIVER AT SR 154
03050109-05			
S-859	BIO	FW	MOUNTAIN CREEK AT SR 32
S-321	W	FW	NORTH RABON CREEK AT S-30-32
RL-05411	RL05	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.8 MI UPSTREAM FROM DAM
S-313	W	FW	LAKE RABON, NORTH RABON CREEK ARM, 2.5 MI UPSTREAM OF DAM
RL-02303	RL02	FW	LAKE RABON, NEAR NE SHORE AND BELOW US 76
S-860	BIO	FW	SOUTH RABON CREEK AT SR 77
S-322	W	FW	SOUTH RABON CREEK ON DIRT ROAD BETWEEN SC 101 & S-30-76
S-312	W	FW	LAKE RABON, SOUTH RABON CREEK ARM, AT S-30-312
RL-03359	RL03	FW	LAKE RABON, 0.6 MI SE OF S-30-312
RL-02305	RL02	FW	LAKE RABON, NEAR BOAT LANDING ON UNNAMED CO. RD OFF S-30-54
S-296	SUMM	FW	LAKE RABON, 300 FEET UPSTREAM OF DAM
S-096	INT/BIO	FW	RABON CREEK AT S-30-54, 8.8 MILES NW OF CROSS HILL
S-307	W	FW	LAKE GREENWOOD, RABON CREEK ARM, 0.8 KM N OF S-30-307
03050109-06			
S-835	BIO	FW	REEDY RIVER AT SR 985
S-986	BIO	FW	MARTIN CREEK AT CRAIGS ROAD
S-778	BIO	FW	REEDY RIVER AT SR 68
S-862	BIO	FW	HORSE CREEK AT SR 69
S-070	W	FW	REEDY RIVER AT US 76
S-987	BIO	FW	WALNUT CREEK, WARE SHOALS EAST #1 AT SR 347
RL-05403	RL05	FW	BOYD MILL POND, 0.5 MI NW OF BRIDGE OVER REEDY RIVER ON SC 252
S-311	SUMM	FW	BOYD MILL POND 0.6 KM W OF DAM
S-861	BIO	FW	WALNUT CREEK AT SR 64
S-021	INT	FW	REEDY RIVER AT S-30-06, E OF WARE SHOALS
S-308	SUMM	FW	LAKE GREENWOOD, REEDY RIVER ARM 150YDS ABOVE RABON CREEK
S-022	W	FW	LAKE GREENWOOD, REEDY RIVER ARM AT S-30-29
03050109-07			
RS-03346	RS03/BIO	FW	ROCKY CREEK AT SC 72 BY-PASS AND SC 254 IN GREENWOOD
S-092	W	FW	CORONACA CREEK AT S-24-100, 4 MI NW OF NINETY SIX
S-233	W	FW	WILSON CREEK AT S-24-101
S-235	W/BIO	FW	WILSON CREEK AT S-24-124

Station #	Type	Class	Description
03050109-07 (continued)			
S-856	BIO	FW	NINETY SIX CREEK AT SR 42
S-093	INT	FW	NINETY SIX CREEK AT SC 702, 5.2 MILES ESE OF NINETY SIX
03050109-08			
RS-06030	RS06	FW	SALUDA RIVER TRIBUTARY AT RIVER RD. BRIDGE, 7.1 MI SE OF WILLIAMSTON
S-990	BIO	FW	MOUNTAIN CREEK TRIBUTARY AT OAK HILL DR, W. OF US 25
S-864	BIO	FW	MOUNTAIN CREEK AT SR 51
S-289	W	FW	BROAD MOUTH CREEK AT S-04-267
RS-04364	RS04/BIO	FW	BROAD MOUTH CREEK AT BRIDGE ON S-04-265, 3.5MI NNW OF HONOEA PATH
S-010	W	FW	BROAD MOUTH CREEK AT US 76
S-775	BIO	FW	BROAD MOUTH CREEK AT S-04-81
S-304	INT	FW	BROAD MOUTH CREEK AT S-01-111
S-125	INT	FW	SALUDA RIVER AT US 25 BYPASS, 1.5 MILES ESE OF WARE SHOALS
S-989	BIO	FW	GIBSON CREEK AT BOLT ROAD
S-858	BIO	FW	TURKEY CREEK AT SR 96
S-024	INT	FW	LAKE GREENWOOD HEADWATERS, JUST UPSTREAM OF S-30-33
RL-02311	RL02	FW	LAKE GREENWOOD, 1.0 MI NW OF SEABOARD RR CROSSING
S-131	W	FW	LAKE GREENWOOD AT US 221, 7.6 MILES NNW OF NINETY SIX
S-097	W	FW	LK GREENWOOD, CANE CREEK ARM AT SC 72, 3.1 MILES SW OF CROSS HILL
RL-04387	RL04	FW	LK GREENWOOD, 2.2 MI NW OF LAKE GREENWOOD STATE PARK
S-303	INT	FW	LAKE GREENWOOD 200 FEET UPSTREAM OF DAM
03050109-09			
S-034	W	FW	LITTLE RIVER AT U.S. BUS 76, IN LAURENS ABOVE WWTP
S-297	W	FW	LITTLE RIVER AT S.C. ROUTE 127
S-135	W	FW	NORTH CREEK AT U.S. 76, 2.8 MILES W OF CLINTON
RS-05400	RS05	FW	BEAVERDAM CREEK AT S-30-341, 7.0 MI S OF LAURENS
S-099	SPRP	FW	LITTLE RIVER AT S-36-22, 8.3 MILES NW OF SILVERSTREET
S-100	BIO	FW	LITTLE RIVER AT SR 48
RS-04526	RS04/BIO	FW	MUDLICK CREEK BETW SC 56 & S-36-65, 9.0 MI NW OF SILVERSTREET
03050109-10			
S-255	W	FW	CLOUDS CREEK AT S-41-26, 4 MILES NW OF BATESBURG
RS-05398	RS05/BIO	FW	WEST CREEK AT S-41-105, 12.4 MI ESE OF SALUDA
S-324	INT	FW	CLOUDS CREEK AT US 378
03050109-11			
S-050	W	FW	LITTLE SALUDA RIVER AT US 378, E OF SALUDA
S-123	INT	FW	LITTLE SALUDA RIVER AT S-41-39, 5.2 MILES NE OF SALUDA
RS-05590	RS05	FW	BIG CREEK AT SC 39, 5.1 MI NW OF SALUDA
S-222	W	FW	LAKE MURRAY, LITTLE SALUDA RIVER ARM AT SC 391
03050109-12			
S-295	W	FW	SALUDA RIVER AT S.C. ROUTE 39
S-047	INT	FW	SALUDA RIVER AT SC 121
S-852	BIO	FW	BEAVERDAM CREEK AT SR 83
S-310	INT	FW	LAKE MURRAY, SALUDA RIVER ARM, 3.8 KM UPSTREAM OF SC 391
S-042	W	FW	BUSH RIVER AT SC 560 S OF JOANNA
S-046	W	FW	BUSH RIVER AT SC ROUTE 34
S-044	W	FW	SCOTT CREEK AT SC 34, SW OF NEWBERRY
S-851	BIO	FW	BUSH RIVER AT SR 244
S-102	W	FW	BUSH RIVER AT S-36-41, 8.5 MILES S OF NEWBERRY
S-309	SUMM	FW	LAKE MURRAY, BUSH RIVER ARM, 4.6 KM UPSTREAM OF SC 391
S-223	W	FW	LAKE MURRAY, SALUDA RIVER ARM, AT SC 391 (BLACKS BRIDGE)

Station #	Type	Class		Description
03050109-13				
RL-05420	RL05	FW		LAKE MURRAY, 0.7 MI NNW OF LAKE MURRAY SHORES
S-279	W	FW		LAKE MURRAY AT MARKER 63
S-211	W	FW		LAKE MURRAY, HOLLANDS LANDING OFF S-36-26
S-212	W	FW		LAKE MURRAY, MACEDONIA LANDING AT END OF S-36-26
S-977	SSS	FW		HOLLOW CREEK AT DERRICK HOLLOW ROAD
S-976	SSS	FW		HOLLOW CREEK AT DOG LEG ROAD
S-978	SSS	FW		LITTLE CREEK AT DEVILS BACKBONE ROAD
S-975	SSS	FW		HOLLOW CREEK AT PASTURE EDGE IMMEDIATELY UPSTREAM OF S-306
S-306	INT	FW		HOLLOW CREEK AT S-32-54
S-974	SSS	FW		HOLLOW CREEK AT LAKE MURRAY
S-973	SSS	FW		LAKE MURRAY AT RIDGE ROAD
RL-04372	RL04	FW		LAKE MURRAY, HOLLOW CREEK ARM, 1.75 MI NNE OF US 378 CROSSING
S-280	W	FW		LAKE MURRAY AT MARKER 102
S-290	W	FW		CAMPING CREEK S-36-202 BELOW GA PACIFIC
S-850	BIO	FW		CAMPING CREEK AT SR 72
S-213	W	FW		LAKE MURRAY AT S-36-15
RL-05418	RL05	FW		LAKE MURRAY, 0.38 MI SSE OF S-32-1322
RL-05410	RL05	FW		LAKE MURRAY AT END OF SHULL ISLAND AT THE END OF S-32-115
RL-03338	RL03	FW		LAKE MURRAY, 0.8 MI S OF COUNTS ISLAND & 0.75 MI NW OF LUNCH ISLAND
RL-06440	RL06	FW		LAKE MURRAY, 0.95 MI NE OF END OF S-32-1239
S-273	W	FW		LAKE MURRAY AT MARKER 166
RL-03334	RL03	FW		LAKE MURRAY, COVE 1.3 MI W OF BALLENTINE
S-274	W	FW		LAKE MURRAY AT MARKER 143
RL-06442	RL06	FW		LAKE MURRAY, 0.65 MI NW JUNCTION OF S-32-109 & S-32-38
RL-02316	RL02	FW		LAKE MURRAY, SW OF JAKES MARINA
S-204	W	FW		LAKE MURRAY AT DAM AT SPILLWAY (MARKER 1)
CL-083	INT	FW		LAKE MURRAY FOREBAY EQUIDISTANT FROM DAM AND SHORELINES
03050109-14				
S-152	W	TPGT	*	SALUDA RIVER JUST BELOW LAKE MURRAY DAM
S-287	W/BIO	FW		RAWLS CREEK AT S-32-107
S-149	W	TPGT	*	SALUDA RIVER AT MEPCO ELECTRIC PLANT WATER INTAKE
S-150	W	FW		LORICK BRANCH AT POINT UPSTREAM OF JUNCTION WITH SALUDA RIVER
S-052	BIO	FW		TWELVEMILE CREEK AT SR 106
RS-02457	RS02	FW		TWELVEMILE CREEK AT S-32-106
S-294	W	FW		TWELVEMILE CREEK AT U.S. 378
S-848	BIO	FW		FOURTEENMILE CREEK AT SR 28
S-260	W/BIO	FW		KINLEY CREEK AT S-32-36 (ST. ANDREWS ROAD) IN IRMO
S-298	INT	TPGT	*	SALUDA RIVER AT USGS GAGING STATION, 1/2 MILE BELOW I-20

Groundwater Monitoring Sites

Well #	Class	Aquifer	Location
03050109-02			
AMB-108	GB	PIEDMONT BEDROCK	CAESAR'S HEAD
AMB-071	GB	SAPROLITE	PICKENS SHALLOW
AMB-082	GB	PIEDMONT BEDROCK	PICKENS DEEP
03050109-06			
AMB-062	GB	SAPROLITE	FORK SHOALS SHALLOW

Well #	Class	Aquifer	Location
03050109-08			
AMB-068	GB	PIEDMONT BEDROCK	CHAPPELS
03050109-10			
AMB-113	GB	PIEDMONT BEDROCK	AMICK POULTRY
03050109-13			
AMB-072	GB	PIEDMONT BEDROCK	BALLENTINE
AMB-064	GB	PIEDMONT BEDROCK	LITTLE MOUNTAIN
AMB-041	GB	MIDDENDORF	SUMMIT
03050109-14			
AMB-103	GB	TERTIARY SANDS	OAK GROVE ELEMENTARY SCHOOL

For further details concerning sampling frequency and parameters sampled, please visit our website at www.scdhec.gov/eqc/admin/html/eqcpubs.html#wqreports for the current State of S.C. Monitoring Strategy.

Water Quality Data

Spreadsheet Legend

Station Information:

STATION NUMBER Station ID

TYPE SCDHEC station type code

P = Primary station, sampled monthly all year round

S = Secondary station, sampled monthly May - October

P* = Secondary station upgraded to primary station parameter coverage and sampling frequency for basin study

W = Special watershed station added for the Savannah River Basin study

BIO = Indicates macroinvertebrate community data assessed

INT = Integrator Station (approximates a Primary station)

RL = Random Lake station

RO = Random Open water station

RS = Random Stream station

RT = Random Tide Creek station

WATERBODY NAME Stream or Lake Name

CLASS Stream classification at the point where monitoring station is located

Parameter Abbreviations and Parameter Measurement Units:

DO Dissolved Oxygen (mg/l)

BOD Five-Day Biochemical Oxygen Demand (mg/l)

pH pH (SU)

TP Total Phosphorus (mg/l)

TN Total Nitrogen (mg/l)

TURB Turbidit y (NTU)

TSS Total Suspended Solids (mg/l)

BACT Fecal Coliform Bacteria (#/100 ml)

NH3 Ammonia (mg/l)

CD Cadm ium (ug/l)

CR Chromium (ug/l)

CU Copper (ug/l)

PB Lead (ug/l)

HG Mercur y (ug/l)

NI Nickel (ug/l)

ZN Zinc (ug/l)

Statistical Abbreviations:

N For *standards compliance*, number of surface samples collected between January 2002 and December 2006. For *trends*, number of surface samples collected between January 1992 and December 2006.

EXC. Number of samples contravening the appropriate standard

% Percentage of samples contravening the appropriate standard

MEAN EXC. Mean of samples that contravened the applied standard

MED For *heavy metals with a human health criterion*, this is the median of all surface samples between January 2002 and December 2006. DL indicates that the median was the detection limit.

MAG Magnitude of any statistically significant trend, average change per year, expressed in parameter measurement units

GEO MEAN Geometric mean of fecal coliform bacteria samples collected between January 2002 and December 2006

Key to Trends:

D Statistically significant decreasing trend in parameter concentration

I Statistically significant increasing trend in parameter concentration

***** No statistically significant trend

STATION					DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS		N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-01														
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW		12	0	0	0	NS	164	0.0146	I	137	0.02
S-088	SE	N SALUDA RVR	FW/ORW		12	0	0	0	D	135	-0.0588	NS	132	0.0286
S-773		N SALUDA RVR	FW		1	0	0	0						
S-004/ S-002	INT	N SALUDA RVR	FW		60	0	0	0	NS	138	0.0009	I	128	0.1
03050109-02														
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW		12	0	0	0	I	164	0.025	I	139	0.05
S-320/ S-558	SE	S SALUDA RVR	FW		12	0	0	0	NS	111	0	I	113	0.1
S-086	I*	MATTHEWS CK	TN											
S-771		S SALUDA RVR												
S-087	SE	S SALUDA RVR	FW		12	0	0	0	D	79	-0.05	I	78	0.0536
RL-02307	RL02	LAKE OOLENOY	FW		12	0	0	0						
S-798	SE	LAKE OOLENOY	FW		12	0	0	0	I	37	0.089	I	33	0.1444
RS-02330	RS02	ADAMS CK	TPGT		11	0	0	0						
S-103	INT	OOLENOY RVR	FW		60	0	0	0	I	94	0.055	I	86	0
S-076		MIDDLE SALUDA RVR												
S-077	SE	MIDDLE SALUDA RVR	FW		12	0	0	0	I	44	0.0922	I	44	0.1389
S-317	I*	OIL CAMP CK	FW											
RS-04530	RS04	MIDDLE SALUDA RVR	FW		12	0	0	0						
S-252	SE	MIDDLE SALUDA RVR	FW		12	0	0	0	NS	78	-0.0143	I	78	0.0667
S-980		CARPENTER CK												
S-299	INT	S SALUDA RVR	FW		61	0	0	0	I	94	0.0769	I	86	0

Appendix A. Saluda River Basin

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-01																	
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	12	0	0	0	I	154	0.0363	11	0	0	0	NS	135	0
S-088	SE	N SALUDA RVR	FW/ORW	12	1	8	5.95	I	135	0.02	10	0	0	0	D	134	-0.155
S-773		N SALUDA RVR	FW	1	0	0	0										
S-004/ S-002	INT	N SALUDA RVR	FW	60	1	2	5.56	NS	139	0.01	58	10	17	139.4	NS	136	-0.5
03050109-02																	
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	12	0	0	0	I	154	0.0457	11	0	0	0	NS	138	0.0134
S-320/ S-558	SE	S SALUDA RVR	FW	12	1	8	5.99	NS	109	-0.0167	11	0	0	0	D	112	-0.0279
S-086	I*	MATTHEWS CK	TN														
S-771		S SALUDA RVR															
S-087	SE	S SALUDA RVR	FW	12	0	0	0	I	80	0.0486	12	0	0	0	NS	79	-0.1
RL-02307	RL02	LAKE OOLENOY	FW	12	0	0	0				11	0	0	0			
S-798	SE	LAKE OOLENOY	FW	12	0	0	0	NS	37	0.0234	12	0	0	0	NS	33	-0.0333
RS-02330	RS02	ADAMS CK	TPGT	11	1	9	5.9				10	5	50	13.8			
S-103	INT	OOLENOY RVR	FW	60	3	5	5.7067	NS	93	0.01	59	2	3	70.5	D	93	-0.4111
S-076		MIDDLE SALUDA RVR															
S-077	SE	MIDDLE SALUDA RVR	FW	12	0	0	0	NS	44	-0.0012	11	0	0	0	D	42	-0.1333
S-317	I*	OIL CAMP CK	FW														
RS-04530	RS04	MIDDLE SALUDA RVR	FW	12	0	0	0				12	0	0	0			
S-252	SE	MIDDLE SALUDA RVR	FW	12	0	0	0	I	79	0.0444	12	0	0	0	NS	78	-0.3
S-980		CARPENTER CK															
S-299	INT	S SALUDA RVR	FW	61	4	7	5.78	NS	93	0.011	60	6	10	100.333	NS	92	-0.3

Appendix A. Saluda River Basin

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	TP N	TP EXC.	TP %	MEAN EXC.	TRENDS (92-2006) TP	TRENDS (92-2006) N	TRENDS (92-2006) MAG	TN N	TN EXC.	TN %	MEAN EXC.	TRENDS (92-2006) TN	TRENDS (92-2006) N	TRENDS (92-2006) MAG
03050109-01																	
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	12	1	8	1.9	NS	98	0	9	1	11	0.45	NS	126	0
S-088	SE	N SALUDA RVR	FW/ORW					NS	97	-0.001					NS	127	0
S-773		N SALUDA RVR	FW														
S-004/ S-002	INT	N SALUDA RVR	FW					NS	115	-0.0008					NS	77	0.005
03050109-02																	
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	12	1	8	0.02	NS	100	0	10	0	0	0	NS	129	0
S-320/ S-558	SE	S SALUDA RVR	FW					D	75	0					NS	105	0
S-086	I*	MATTHEWS CK	TN														
S-771		S SALUDA RVR															
S-087	SE	S SALUDA RVR	FW					D	56	-0.0002							
RL-02307	RL02	LAKE OOLENOY	FW	12	0	0	0				10	0	0	0			
S-798	SE	LAKE OOLENOY	FW	11	0	0	0				12	0	0	0	NS	31	-0.0098
RS-02330	RS02	ADAMS CK	TPGT														
S-103	INT	OOLENOY RVR	FW					D	80	0					NS	77	0.0044
S-076		MIDDLE SALUDA RVR															
S-077	SE	MIDDLE SALUDA RVR	FW					NS	31	0					NS	34	0.0023
S-317	I*	OIL CAMP CK	FW														
RS-04530	RS04	MIDDLE SALUDA RVR	FW														
S-252	SE	MIDDLE SALUDA RVR	FW					NS	57	0							
S-980		CARPENTER CK															
S-299	INT	S SALUDA RVR	FW					D	83	-0.0003					I	80	0.0089

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050109-01										
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	6	0	0	0			
S-088	SE	N SALUDA RVR	FW/ORW							
S-773		N SALUDA RVR	FW							
S-004/ S-002	INT	N SALUDA RVR	FW							
03050109-02										
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	6	0	0	0			
S-320/ S-558	SE	S SALUDA RVR	FW							
S-086	I*	MATTHEWS CK	TN							
S-771		S SALUDA RVR								
S-087	SE	S SALUDA RVR	FW							
RL-02307	RL02	LAKE OOLENOY	FW	6	0	0	0			
S-798	SE	LAKE OOLENOY	FW	5	0	0	0			
RS-02330	RS02	ADAMS CK	TPGT							
S-103	INT	OOLENOY RVR	FW							
S-076		MIDDLE SALUDA RVR								
S-077	SE	MIDDLE SALUDA RVR	FW							
S-317	I*	OIL CAMP CK	FW							
RS-04530	RS04	MIDDLE SALUDA RVR	FW							
S-252	SE	MIDDLE SALUDA RVR	FW							
S-980		CARPENTER CK								
S-299	INT	S SALUDA RVR	FW							

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050109-01											
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	1.1225	12	0	0	0	D	136	0
S-088	SE	N SALUDA RVR	FW/ORW	5.0532	12	0	0	0	D	134	0
S-773		N SALUDA RVR	FW								
S-004/ S-002	INT	N SALUDA RVR	FW	276.638	60	21	35	3855.2381	NS	140	-4.2262
03050109-02											
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	2.4653	12	0	0	0	D	138	0
S-320/ S-558	SE	S SALUDA RVR	FW	6.7818	11	0	0	0	NS	112	0.2361
S-086	I*	MATTHEWS CK	TN								
S-771		S SALUDA RVR									
S-087	SE	S SALUDA RVR	FW	103.0146	12	2	17	775	NS	81	-5
RL-02307	RL02	LAKE OOLENOY	FW	3.5535	12	0	0	0			
S-798	SE	LAKE OOLENOY	FW	3.1619	12	0	0	0	NS	32	-0.1111
RS-02330	RS02	ADAMS CK	TPGT	69.2585	11	0	0	0			
S-103	INT	OOLENOY RVR	FW	136.394	60	10	17	795	NS	95	2.75
S-076		MIDDLE SALUDA RVR									
S-077	SE	MIDDLE SALUDA RVR	FW	39.8468	12	0	0	0	NS	44	-0.5
S-317	I*	OIL CAMP CK	FW								
RS-04530	RS04	MIDDLE SALUDA RVR	FW	97.2037	11	0	0	0			
S-252	SE	MIDDLE SALUDA RVR	FW	89.1256	12	2	17	605	NS	80	-2.7411
S-980		CARPENTER CK									
S-299	INT	S SALUDA RVR	FW	169.5878	61	11	18	2869.0909	NS	92	3.3333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-01															
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	7	0	0	0	4	0	0	0	4	0	0	0
S-088	SE	N SALUDA RVR	FW/ORW	8	0	0	0	4	0	0	0	4	0	0	0
S-773		N SALUDA RVR	FW												
S-004/ S-002	INT	N SALUDA RVR	FW	47	0	0	0	20	0	0	0	20	0	0	0
03050109-02															
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	8	0	0	0	4	0	0	0	4	0	0	0
S-320/ S-558	SE	S SALUDA RVR	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-086	I*	MATTHEWS CK	TN												
S-771		S SALUDA RVR													
S-087	SE	S SALUDA RVR	FW	9	0	0	0	4	0	0	0	4	0	0	0
RL-02307	RL02	LAKE OOLENOY	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-798	SE	LAKE OOLENOY	FW	9	0	0	0	4	0	0	0	4	0	0	0
RS-02330	RS02	ADAMS CK	TPGT	8	0	0	0	4	0	0	0	4	0	0	0
S-103	INT	OOLENOY RVR	FW	43	0	0	0	20	0	0	0	20	0	0	0
S-076		MIDDLE SALUDA RVR													
S-077	SE	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-317	I*	OIL CAMP CK	FW												
RS-04530	RS04	MIDDLE SALUDA RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-252	SE	MIDDLE SALUDA RVR	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-980		CARPENTER CK													
S-299	INT	S SALUDA RVR	FW	48	0	0	0	21	0	0	0	21	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-01															
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	4	0	0	0	4	0	0	0	4	0	0	0
S-088	SE	N SALUDA RVR	FW/ORW	4	0	0	0	4	0	0	0	4	0	0	0
S-773		N SALUDA RVR	FW												
S-004/ S-002	INT	N SALUDA RVR	FW	20	0	0	0	20	0	0	0	20	0	0	0
03050109-02															
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	4	1	25	46	4	0	0	0	4	0	0	0
S-320/ S-558	SE	S SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-086	I*	MATTHEWS CK	TN												
S-771		S SALUDA RVR													
S-087	SE	S SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-02307	RL02	LAKE OOLENOY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-798	SE	LAKE OOLENOY	FW	4	0	0	0	4	0	0	0	4	0	0	0
RS-02330	RS02	ADAMS CK	TPGT	4	0	0	0	4	0	0	0	4	0	0	0
S-103	INT	OOLENOY RVR	FW	20	0	0	0	20	0	0	0	20	0	0	0
S-076		MIDDLE SALUDA RVR													
S-077	SE	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-317	I*	OIL CAMP CK	FW												
RS-04530	RS04	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-252	SE	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-980		CARPENTER CK													
S-299	INT	S SALUDA RVR	FW	21	0	0	0	21	0	0	0	21	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-01											
S-292	SE	LAKE, N SALUDA RESERVOIR	ORW	4	0	0	0	4	0	0	0
S-088	SE	N SALUDA RVR	FW/ORW	4	0	0	0	4	0	0	0
S-773		N SALUDA RVR	FW								
S-004/ S-002	INT	N SALUDA RVR	FW	20	0	0	0	20	0	0	0
03050109-02											
S-291	SE	LAKE, TABLE ROCK RESERVOIR	ORW	4	0	0	0	4	0	0	0
S-320/ S-558	SE	S SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-086	I*	MATTHEWS CK	TN								
S-771		S SALUDA RVR									
S-087	SE	S SALUDA RVR	FW	4	0	0	0	4	0	0	0
RL-02307	RL02	LAKE OOLENOY	FW	4	0	0	0	4	0	0	0
S-798	SE	LAKE OOLENOY	FW	4	0	0	0	4	0	0	0
RS-02330	RS02	ADAMS CK	TPGT	4	0	0	0	4	0	0	0
S-103	INT	OOLENOY RVR	FW	20	0	0	0	20	0	0	0
S-076		MIDDLE SALUDA RVR									
S-077	SE	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-317	I*	OIL CAMP CK	FW								
RS-04530	RS04	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-252	SE	MIDDLE SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-980		CARPENTER CK									
S-299	INT	S SALUDA RVR	FW	21	1	5	27	21	0	0	0

STATION					DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS		N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-03														
S-991		SHOAL CK												
S-866		SHOALS CK												
S-250	SE	LAKE, SALUDA LAKE	FW		12	0	0	0	NS	141	-0.0143	I	139	0.0429
S-314	SE	LAKE, SALUDA LAKE	FW		12	0	0	0	NS	46	-0.0464	I	36	0.0826
RL-03349	RL03	LAKE, SALUDA	FW		12	0	0	0						
RL-06427	RL06	LAKE, SALUDA LAKE	FW		12	0	0	0						
RL-05401	RL05	LAKE, SALUDA LAKE	FW		12	0	0	0						
S-315	SE	MILL CK	FW		12	0	0	0	NS	123	-0.02	I	123	0.0667
S-005	SE	GEORGES CK TRIB	FW		12	0	0	0	I	81	0.068	NS	80	0.0667
RS-06151	RS06	BURDINE CK	FW		12	0	0	0						
S-865		GEORGES CK												
S-300	INT	GEORGES CK	FW		60	0	0	0	NS	93	0.0175	I	84	0
S-007	SE	SALUDA RVR	FW		12	0	0	0	NS	141	0.0167	NS	141	0.0062
S-301	INT	BIG BRUSHY CK	FW		59	5	8	4.05	NS	91	-0.022	I	89	0
S-267	SE	SALUDA RVR TRIB	FW		12	0	0	0	NS	80	0.0273	NS	78	0.0155
S-171	SE	GROVE CK	FW		13	0	0	0	NS	83	0.02	I	82	0.1
S-774		GROVE CK												
RS-02462	RS02	GROVE CK	FW		10	0	0	0						
S-119	INT	SALUDA RVR	FW		59	5	8	4.282	NS	131	-0.0363	I	129	0.1
S-302	INT	BIG CK	FW		59	5	8	3.736	NS	89	0.0225	NS	89	0

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-03																	
S-991		SHOAL CK															
S-866		SHOALS CK															
S-250	SE	LAKE, SALUDA LAKE	FW	12	0	0	0	I	139	0.0288	12	2	17	68.5	D	140	-0.5
S-314	SE	LAKE, SALUDA LAKE	FW	12	0	0	0	NS	45	0.0093	12	2	17	36.5	NS	36	-0.1
RL-03349	RL03	LAKE, SALUDA	FW	12	1	8	5.69				12	1	8	28			
RL-06427	RL06	LAKE, SALUDA LAKE	FW	12	0	0	0				12	0	0	0			
RL-05401	RL05	LAKE, SALUDA LAKE	FW	12	1	8	5.67				12	0	0	0			
S-315	SE	MILL CK	FW	12	0	0	0	I	124	0.0174	12	0	0	0	NS	124	-0.0692
S-005	SE	GEORGES CK TRIB	FW	12	0	0	0	I	80	0.0622	10	2	20	81	D	78	-2
RS-06151	RS06	BURDINE CK	FW	12	0	0	0				10	0	0	0			
S-865		GEORGES CK															
S-300	INT	GEORGES CK	FW	58	0	0	0	NS	91	0.0043	60	3	5	138.333	NS	89	-0.5
S-007	SE	SALUDA RVR	FW	12	0	0	0	I	141	0.0338	12	0	0	0	D	139	-0.5
S-301	INT	BIG BRUSHY CK	FW	59	1	2	5.68	NS	91	-0.006	58	4	7	117.5	NS	88	-0.2183
S-267	SE	SALUDA RVR TRIB	FW	12	0	0	0	I	80	0.0425	12	0	0	0	NS	77	0.4778
S-171	SE	GROVE CK	FW	13	0	0	0	I	83	0.0206	13	1	8	72	NS	80	0.1056
S-774		GROVE CK															
RS-02462	RS02	GROVE CK	FW	11	0	0	0				10	0	0	0			
S-119	INT	SALUDA RVR	FW	60	1	2	5.9	NS	134	0.0018	58	3	5	80	D	132	-0.6307
S-302	INT	BIG CK	FW	59	3	5	6.8133	NS	89	0.0067	58	3	5	160	D	88	-0.725

STATION				TP	TP	TP	MEAN	TRENDS (92-2006)			TN	TN	TN	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TP	N	MAG	N	EXC.	%	EXC.	TN	N	MAG
03050109-03																	
S-991		SHOAL CK															
S-866		SHOALS CK															
S-250	SE	LAKE, SALUDA LAKE	FW	12	0	0	0	NS	101	0	10	0	0	0	NS	126	-0.0033
S-314	SE	LAKE, SALUDA LAKE	FW	12	0	0	0				10	0	0	0	NS	31	-0.0017
RL-03349	RL03	LAKE, SALUDA	FW	12	0	0	0				6	0	0	0			
RL-06427	RL06	LAKE, SALUDA LAKE	FW	12	0	0	0				11	0	0	0			
RL-05401	RL05	LAKE, SALUDA LAKE	FW	12	0	0	0				11	0	0	0			
S-315	SE	MILL CK	FW					D	86	-0.0055					NS	112	0.0007
S-005	SE	GEORGES CK TRIB	FW					NS	57	0.0075							
RS-06151	RS06	BURDINE CK	FW														
S-865		GEORGES CK															
S-300	INT	GEORGES CK	FW					NS	81	-0.0004					NS	77	0.0014
S-007	SE	SALUDA RVR	FW					NS	104	0					NS	132	0
S-301	INT	BIG BRUSHY CK	FW					I	81	0.01					I	69	0.07
S-267	SE	SALUDA RVR TRIB	FW					D	52	-0.1155							
S-171	SE	GROVE CK	FW					NS	59	0.005							
S-774		GROVE CK															
RS-02462	RS02	GROVE CK	FW														
S-119	INT	SALUDA RVR	FW					NS	107	0					I	66	0.0133
S-302	INT	BIG CK	FW					D	79	-0.0069					D	67	-0.0513

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050109-03										
S-991		SHOAL CK								
S-866		SHOALS CK								
S-250	SE	LAKE, SALUDA LAKE	FW	6	0	0	0			
S-314	SE	LAKE, SALUDA LAKE	FW	6	0	0	0			
RL-03349	RL03	LAKE, SALUDA	FW	6	0	0	0			
RL-06427	RL06	LAKE, SALUDA LAKE	FW	6	0	0	0			
RL-05401	RL05	LAKE, SALUDA LAKE	FW	5	0	0	0			
S-315	SE	MILL CK	FW							
S-005	SE	GEORGES CK TRIB	FW							
RS-06151	RS06	BURDINE CK	FW							
S-865		GEORGES CK								
S-300	INT	GEORGES CK	FW							
S-007	SE	SALUDA RVR	FW							
S-301	INT	BIG BRUSHY CK	FW							
S-267	SE	SALUDA RVR TRIB	FW							
S-171	SE	GROVE CK	FW							
S-774		GROVE CK								
RS-02462	RS02	GROVE CK	FW							
S-119	INT	SALUDA RVR	FW							
S-302	INT	BIG CK	FW							

STATION NUMBER	TYPE	WATERBODY NAME	CLASS		GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050109-03												
S-991		SHOAL CK										
S-866		SHOALS CK										
S-250	SE	LAKE, SALUDA LAKE	FW		130.1107	12	3	25	1300	NS	140	-3.8
S-314	SE	LAKE, SALUDA LAKE	FW		106.5622	12	3	25	1533.3333	NS	37	1.9762
RL-03349	RL03	LAKE, SALUDA	FW		83.2998	12	2	17	875			
RL-06427	RL06	LAKE, SALUDA LAKE	FW		27.5199	12	0	0	0			
RL-05401	RL05	LAKE, SALUDA LAKE	FW		19.8324	12	0	0	0			
S-315	SE	MILL CK	FW		568.7092	12	7	58	2501.4286	I	123	20
S-005	SE	GEORGES CK TRIB	FW		431.6055	12	4	33	2350	NS	81	-5.9821
RS-06151	RS06	BURDINE CK	FW		136.4227	12	0	0	0			
S-865		GEORGES CK										
S-300	INT	GEORGES CK	FW		303.7763	60	22	37	1272.7273	NS	92	0
S-007	SE	SALUDA RVR	FW		115.83	12	1	8	1200	NS	141	-2.25
S-301	INT	BIG BRUSHY CK	FW		251.469	60	17	28	2362.3529	NS	91	2.75
S-267	SE	SALUDA RVR TRIB	FW		609.9164	12	7	58	1637.1429	NS	78	-3.3333
S-171	SE	GROVE CK	FW		214.4715	13	2	15	1700	NS	83	-20
S-774		GROVE CK										
RS-02462	RS02	GROVE CK	FW		242.5242	10	2	20	775			
S-119	INT	SALUDA RVR	FW		100.2875	59	6	10	711.6667	NS	133	3.2917
S-302	INT	BIG CK	FW		235.4032	59	15	25	1542.6667	NS	88	3

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-03															
S-991		SHOAL CK													
S-866		SHOALS CK													
S-250	SE	LAKE, SALUDA LAKE	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-314	SE	LAKE, SALUDA LAKE	FW	9	0	0	0	4	0	0	0	4	0	0	0
RL-03349	RL03	LAKE, SALUDA	FW	6	0	0	0	4	0	0	0	4	0	0	0
RL-06427	RL06	LAKE, SALUDA LAKE	FW	9	0	0	0	4	0	0	0	4	0	0	0
RL-05401	RL05	LAKE, SALUDA LAKE	FW	12	0	0	0	4	0	0	0	4	0	0	0
S-315	SE	MILL CK	FW	8	0	0	0	4	0	0	0	4	3	75	340
S-005	SE	GEORGES CK TRIB	FW	10	0	0	0	4	0	0	0	4	0	0	0
RS-06151	RS06	BURDINE CK	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-865		GEORGES CK													
S-300	INT	GEORGES CK	FW	45	0	0	0	20	0	0	0	20	1	5	290
S-007	SE	SALUDA RVR	FW	5	0	0	0	4	0	0	0	4	0	0	0
S-301	INT	BIG BRUSHY CK	FW	45	0	0	0	20	0	0	0	20	0	0	0
S-267	SE	SALUDA RVR TRIB	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-171	SE	GROVE CK	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-774		GROVE CK													
RS-02462	RS02	GROVE CK	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-119	INT	SALUDA RVR	FW	45	0	0	0	20	0	0	0	20	0	0	0
S-302	INT	BIG CK	FW	45	0	0	0	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-03															
S-991		SHOAL CK													
S-866		SHOALS CK													
S-250	SE	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-314	SE	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-03349	RL03	LAKE, SALUDA	FW	4	1	25	15	4	0	0	0	4	0	0	0
RL-06427	RL06	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-05401	RL05	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-315	SE	MILL CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-005	SE	GEORGES CK TRIB	FW	4	0	0	0	4	0	0	0	4	0	0	0
RS-06151	RS06	BURDINE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-865		GEORGES CK													
S-300	INT	GEORGES CK	FW	20	2	10	12.5	20	0	0	0	20	0	0	0
S-007	SE	SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-301	INT	BIG BRUSHY CK	FW	20	0	0	0	20	0	0	0	20	0	0	0
S-267	SE	SALUDA RVR TRIB	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-171	SE	GROVE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-774		GROVE CK													
RS-02462	RS02	GROVE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-119	INT	SALUDA RVR	FW	20	1	5	12	20	0	0	0	20	0	0	0
S-302	INT	BIG CK	FW	20	0	0	0	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-03											
S-991		SHOAL CK									
S-866		SHOALS CK									
S-250	SE	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0
S-314	SE	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0
RL-03349	RL03	LAKE, SALUDA	FW	4	0	0	0	4	0	0	0
RL-06427	RL06	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0
RL-05401	RL05	LAKE, SALUDA LAKE	FW	4	0	0	0	4	0	0	0
S-315	SE	MILL CK	FW	4	0	0	0	4	1	25	88
S-005	SE	GEORGES CK TRIB	FW	4	0	0	0	4	0	0	0
RS-06151	RS06	BURDINE CK	FW	4	0	0	0	4	0	0	0
S-865		GEORGES CK									
S-300	INT	GEORGES CK	FW	20	0	0	0	20	0	0	0
S-007	SE	SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-301	INT	BIG BRUSHY CK	FW	20	1	5	25	20	0	0	0
S-267	SE	SALUDA RVR TRIB	FW	4	0	0	0	4	0	0	0
S-171	SE	GROVE CK	FW	4	0	0	0	4	0	0	0
S-774		GROVE CK									
RS-02462	RS02	GROVE CK	FW	4	0	0	0	4	0	0	0
S-119	INT	SALUDA RVR	FW	20	0	0	0	20	1	5	88
S-302	INT	BIG CK	FW	20	1	5	54	20	0	0	0

STATION				DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-04													
S-073	SE	REEDY RVR	FW	11	0	0	0	NS	138	0.0217	I	140	0.0556
S-265		LANGSTON CK											
S-264	SE	LANGSTON CK	FW	12	0	0	0	NS	79	-0.035	NS	80	0.0167
S-319	SE	REEDY RVR	FW	12	0	0	0	NS	46	-0.08	I	45	0.0643
S-981		RICHLAND CK											
S-067	SE	BRUSHY CK	FW	12	0	0	0	D	78	-0.04	I	77	0.0833
S-867		BRUSHY CK											
S-139		LAUREL CK											
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	12	0	0	0						
S-323	SPRP	REEDY RVR	FW	59	1	2	4	NS	83	0.01	NS	72	0
S-972		BALDWIN CK											
S-091	SE	ROCKY CK	FW	13	0	0	0	NS	80	0.02	NS	80	0.0381
S-833		REEDY RVR											
S-982		HARRISON CK											
S-072	INT	REEDY RVR	FW	59	1	2	4.5	NS	139	0.03	NS	132	0
S-983		HUFF CK											
S-984		TRIBUTARY TO BAKER CK											
S-863		HUFF CK	FW	2	0	0	0						
S-178	INT	HUFF CK	FW	59	0	0	0	NS	139	0	I	132	0.04
S-985		LITTLE CK											
S-834		REEDY RVR											
03050109-05													
S-859		MOUNTAIN CK											
S-321/ RS-02326	SE	N RABON CK	FW	23	0	0	0	NS	49	0	I	49	0.11
RL-05411	RL05	LAKE RABON	FW	11	0	0	0						
S-313	SE	LAKE RABON	FW	12	0	0	0	NS	42	0.02	NS	37	0.0225
RL-02303	RL02	LAKE RABON	FW	12	0	0	0						
S-860		S RABON CK											
S-322	SE	S RABON CK	FW	12	0	0	0	NS	38	0.0511	I	38	0.1
S-312/ RL-06425	SE	LAKE RABON	FW	19	0	0	0	NS	50	-0.0467	NS	46	0
RL-03359	RL03	LAKE RABON	FW	12	0	0	0						
RL-02305	RL02	LAKE RABON	FW	12	0	0	0						
S-296/ RL-04381	SUMM	LAKE RABON	FW	42	1	2	3.82	NS	185	-0.0006	I	157	0.0111
S-096	INT	RABON CK	FW	60	0	0	0	NS	141	-0.0062	I	136	0.0714
S-307	SE	LAKE GREENWOOD	FW	12	0	0	0	NS	57	0.0896	NS	42	0.0571

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-04																	
S-073	SE	REEDY RVR	FW	12	0	0	0	I	138	0.0388	12	0	0	0	NS	139	-0.0155
S-265		LANGSTON CK															
S-264	SE	LANGSTON CK	FW	12	0	0	0	NS	80	0.0233	12	0	0	0	NS	79	0.1646
S-319	SE	REEDY RVR	FW	12	0	0	0	NS	46	-0.0006	11	0	0	0	D	43	-0.5778
S-981		RICHLAND CK															
S-067	SE	BRUSHY CK	FW	12	0	0	0	NS	81	0.0246	12	0	0	0	NS	78	-0.05
S-867		BRUSHY CK															
S-139		LAUREL CK															
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	12	0	0	0				12	0	0	0			
S-323	SPRP	REEDY RVR	FW	60	0	0	0	D	84	-0.0958	59	6	10	161.667	D	84	-1.2
S-972		BALDWIN CK															
S-091	SE	ROCKY CK	FW	13	0	0	0	I	80	0.0557	13	0	0	0	NS	81	-0.2125
S-833		REEDY RVR															
S-982		HARRISON CK															
S-072	INT	REEDY RVR	FW	60	1	2	5.78	NS	140	0.009	59	7	12	115.571	D	137	-0.5
S-983		HUFF CK															
S-984		TRIBUTARY TO BAKER CK															
S-863		HUFF CK	FW	2	0	0	0										
S-178	INT	HUFF CK	FW	60	3	5	7.3067	NS	140	0.0046	59	2	3	65	NS	137	-0.05
S-985		LITTLE CK															
S-834		REEDY RVR															
03050109-05																	
S-859		MOUNTAIN CK															
S-321/ RS-02326	SE	N RABON CK	FW	23	0	0	0	I	49	0.06	23	2	9	135	NS	48	-0.2694
RL-05411	RL05	LAKE RABON	FW	10	1	10	8.51				11	0	0	0			
S-313	SE	LAKE RABON	FW	12	0	0	0	NS	43	-0.0245	11	0	0	0	NS	34	0.24
RL-02303	RL02	LAKE RABON	FW	12	0	0	0				12	0	0	0			
S-860		S RABON CK															
S-322	SE	S RABON CK	FW	12	0	0	0	I	38	0.044	12	0	0	0	NS	37	-0.5989
S-312/ RL-06425	SE	LAKE RABON	FW	19	0	0	0	NS	51	-0.0056	18	0	0	0	NS	42	-0.175
RL-03359	RL03	LAKE RABON	FW	12	1	8	8.73				12	0	0	0			
RL-02305	RL02	LAKE RABON	FW	12	0	0	0				12	0	0	0			
S-296/ RL-04381	SUMM	LAKE RABON	FW	41	5	12	8.652	I	181	0.02	42	0	0	0	D	160	-0.1667
S-096	INT	RABON CK	FW	59	0	0	0	NS	142	0	58	2	3	132.5	D	138	-0.5
S-307	SE	LAKE GREENWOOD	FW	12	0	0	0	NS	55	0.0626	11	0	0	0	D	40	-0.62

STATION				TP	TP	TP	MEAN	TRENDS (92-2006)			TN	TN	TN	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TP	N	MAG	N	EXC.	%	EXC.	TN	N	MAG
03050109-04																	
S-073	SE	REEDY RVR	FW					NS	103	0					NS	131	-0.0067
S-265		LANGSTON CK															
S-264	SE	LANGSTON CK	FW					NS	58	-0.0002							
S-319	SE	REEDY RVR	FW					D	34	-0.0012					NS	39	-0.0146
S-981		RICHLAND CK															
S-067	SE	BRUSHY CK	FW					NS	55	0							
S-867		BRUSHY CK															
S-139		LAUREL CK															
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW														
S-323	SPRP	REEDY RVR	FW					NS	59	-0.004					D	65	-0.1563
S-972		BALDWIN CK															
S-091	SE	ROCKY CK	FW					D	57	-0.0053							
S-833		REEDY RVR															
S-982		HARRISON CK															
S-072	INT	REEDY RVR	FW					D	115	-0.0113					NS	74	-0.0056
S-983		HUFF CK															
S-984		TRIBUTARY TO BAKER CK															
S-863		HUFF CK	FW														
S-178	INT	HUFF CK	FW					D	116	-0.0034					NS	74	-0.006
S-985		LITTLE CK															
S-834		REEDY RVR															
03050109-05																	
S-859		MOUNTAIN CK															
S-321/ RS-02326	SE	N RABON CK	FW					NS	38	0					NS	37	-0.0178
RL-05411	RL05	LAKE RABON	FW	11	0	0	0				11	0	0	0			
S-313	SE	LAKE RABON	FW	11	0	0	0				12	0	0	0			
RL-02303	RL02	LAKE RABON	FW	12	0	0	0				7	0	0	0			
S-860		S RABON CK															
S-322	SE	S RABON CK	FW												NS	31	-0.0217
S-312/ RL-06425	SE	LAKE RABON	FW	19	0	0	0	D	32	-0.0007	20	1	5	3.1	NS	37	-0.0136
RL-03359	RL03	LAKE RABON	FW	12	0	0	0				6	0	0	0			
RL-02305	RL02	LAKE RABON	FW	12	0	0	0				7	0	0	0			
S-296/ RL-04381	SUMM	LAKE RABON	FW	43	0	0	0	D	130	0	33	0	0	0	NS	147	-0.0013
S-096	INT	RABON CK	FW					D	115	-0.001					NS	73	-0.003
S-307	SE	LAKE GREENWOOD	FW	12	0	0	0	D	32	-0.0021	12	0	0	0	NS	37	-0.0018

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050109-04										
S-073	SE	REEDY RVR	FW					I	77	0.6667
S-265		LANGSTON CK								
S-264	SE	LANGSTON CK	FW							
S-319	SE	REEDY RVR	FW							
S-981		RICHLAND CK								
S-067	SE	BRUSHY CK	FW							
S-867		BRUSHY CK								
S-139		LAUREL CK								
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW							
S-323	SPRP	REEDY RVR	FW							
S-972		BALDWIN CK								
S-091	SE	ROCKY CK	FW							
S-833		REEDY RVR								
S-982		HARRISON CK								
S-072	INT	REEDY RVR	FW							
S-983		HUFF CK								
S-984		TRIBUTARY TO BAKER CK								
S-863		HUFF CK	FW							
S-178	INT	HUFF CK	FW							
S-985		LITTLE CK								
S-834		REEDY RVR								
03050109-05										
S-859		MOUNTAIN CK								
S-321/ RS-02326	SE	N RABON CK	FW							
RL-05411	RL05	LAKE RABON	FW	5	0	0	0			
S-313	SE	LAKE RABON	FW	6	0	0	0			
RL-02303	RL02	LAKE RABON	FW	6	0	0	0			
S-860		S RABON CK								
S-322	SE	S RABON CK	FW							
S-312/ RL-06425	SE	LAKE RABON	FW	10	0	0	0			
RL-03359	RL03	LAKE RABON	FW	6	0	0	0			
RL-02305	RL02	LAKE RABON	FW	6	0	0	0			
S-296/ RL-04381	SUMM	LAKE RABON	FW	28	0	0	0			
S-096	INT	RABON CK	FW							
S-307	SE	LAKE GREENWOOD	FW	6	0	0	0			

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050109-04											
S-073	SE	REEDY RVR	FW	151.4743	12	2	17	510	NS	142	3.125
S-265		LANGSTON CK									
S-264	SE	LANGSTON CK	FW	140.261	12	3	25	456.6667	D	81	-77.5
S-319	SE	REEDY RVR	FW	290.1079	12	7	58	845.7143	NS	44	-23.9286
S-981		RICHLAND CK									
S-067	SE	BRUSHY CK	FW	1177.2034	13	10	77	2638	D	81	-190
S-867		BRUSHY CK									
S-139		LAUREL CK									
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	533.3388	12	7	58	3032.8571			
S-323	SPRP	REEDY RVR	FW	227.7108	59	18	31	3890	NS	83	-6.5833
S-972		BALDWIN CK									
S-091	SE	ROCKY CK	FW	661.1114	13	10	77	1312	NS	82	-23.3333
S-833		REEDY RVR									
S-982		HARRISON CK									
S-072	INT	REEDY RVR	FW	259.9246	58	17	29	1771.1765	D	139	-17.45
S-983		HUFF CK									
S-984		TRIBUTARY TO BAKER CK									
S-863		HUFF CK	FW								
S-178	INT	HUFF CK	FW	219.1573	59	16	27	800	NS	140	-5.9028
S-985		LITTLE CK									
S-834		REEDY RVR									
03050109-05											
S-859		MOUNTAIN CK									
S-321/ RS-02326	SE	N RABON CK	FW	231.71	23	8	35	672.5	NS	47	4
RL-05411	RL05	LAKE RABON	FW	8.3517	11	0	0	0			
S-313	SE	LAKE RABON	FW	14.9103	12	0	0	0	NS	37	0.2321
RL-02303	RL02	LAKE RABON	FW	6.0252	12	0	0	0			
S-860		S RABON CK									
S-322	SE	S RABON CK	FW	161.6081	12	2	17	725	D	38	-20
S-312/ RL-06425	SE	LAKE RABON	FW	13.7651	20	0	0	0	NS	46	0.1071
RL-03359	RL03	LAKE RABON	FW	5.8997	12	0	0	0			
RL-02305	RL02	LAKE RABON	FW	3.9488	12	0	0	0			
S-296/ RL-04381	SUMM	LAKE RABON	FW	3.2656	42	0	0	0	NS	161	0
S-096	INT	RABON CK	FW	143.0125	60	5	8	1328	NS	143	-3.3333
S-307	SE	LAKE GREENWOOD	FW	16.6686	12	0	0	0	NS	42	0.1556

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-04															
S-073	SE	REEDY RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-265		LANGSTON CK													
S-264	SE	LANGSTON CK	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-319	SE	REEDY RVR	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-981		RICHLAND CK													
S-067	SE	BRUSHY CK	FW	5	0	0	0	4	0	0	0	4	0	0	0
S-867		BRUSHY CK													
S-139		LAUREL CK													
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-323	SPRP	REEDY RVR	FW	42	0	0	0	20	0	0	0	20	0	0	0
S-972		BALDWIN CK													
S-091	SE	ROCKY CK	FW	8	0	0	0	4	0	0	0	4	0	0	0
S-833		REEDY RVR													
S-982		HARRISON CK													
S-072	INT	REEDY RVR	FW	44	0	0	0	20	0	0	0	20	0	0	0
S-983		HUFF CK													
S-984		TRIBUTARY TO BAKER CK													
S-863		HUFF CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
S-178	INT	HUFF CK	FW	43	0	0	0	20	0	0	0	20	0	0	0
S-985		LITTLE CK													
S-834		REEDY RVR													
03050109-05															
S-859		MOUNTAIN CK													
S-321/ RS-02326	SE	N RABON CK	FW	15	0	0	0	7	0	0	0	7	0	0	0
RL-05411	RL05	LAKE RABON	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-313	SE	LAKE RABON	FW	9	0	0	0	4	0	0	0	4	0	0	0
RL-02303	RL02	LAKE RABON	FW	7	0	0	0	4	0	0	0	4	0	0	0
S-860		S RABON CK													
S-322	SE	S RABON CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-312/ RL-06425	SE	LAKE RABON	FW	15	0	0	0	7	0	0	0	7	0	0	0
RL-03359	RL03	LAKE RABON	FW	6	0	0	0	4	0	0	0	4	0	0	0
RL-02305	RL02	LAKE RABON	FW	7	0	0	0	4	0	0	0	4	0	0	0
S-296/ RL-04381	SUMM	LAKE RABON	FW	32	0	0	0	14	0	0	0	14	0	0	0
S-096	INT	RABON CK	FW	44	0	0	0	20	0	0	0	20	0	0	0
S-307	SE	LAKE GREENWOOD	FW	10	0	0	0	4	0	0	0	4	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-04															
S-073	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-265		LANGSTON CK													
S-264	SE	LANGSTON CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-319	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-981		RICHLAND CK													
S-067	SE	BRUSHY CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-867		BRUSHY CK													
S-139		LAUREL CK													
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-323	SPRP	REEDY RVR	FW	20	1	5	18	20	0	0	0	20	0	0	0
S-972		BALDWIN CK													
S-091	SE	ROCKY CK	FW	4	1	25	15	4	0	0	0	4	0	0	0
S-833		REEDY RVR													
S-982		HARRISON CK													
S-072	INT	REEDY RVR	FW	20	1	5	11	20	0	0	0	20	0	0	0
S-983		HUFF CK													
S-984		TRIBUTARY TO BAKER CK													
S-863		HUFF CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
S-178	INT	HUFF CK	FW	20	1	5	19	20	0	0	0	20	0	0	0
S-985		LITTLE CK													
S-834		REEDY RVR													
03050109-05															
S-859		MOUNTAIN CK													
S-321/ RS-02326	SE	N RABON CK	FW	7	0	0	0	7	0	0	0	7	0	0	0
RL-05411	RL05	LAKE RABON	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-313	SE	LAKE RABON	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-02303	RL02	LAKE RABON	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-860		S RABON CK													
S-322	SE	S RABON CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-312/ RL-06425	SE	LAKE RABON	FW	7	0	0	0	7	0	0	0	7	0	0	0
RL-03359	RL03	LAKE RABON	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-02305	RL02	LAKE RABON	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-296/ RL-04381	SUMM	LAKE RABON	FW	14	0	0	0	14	0	0	0	14	0	0	0
S-096	INT	RABON CK	FW	20	0	0	0	20	0	0	0	20	0	0	0
S-307	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0	4	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-04											
S-073	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0
S-265		LANGSTON CK									
S-264	SE	LANGSTON CK	FW	4	0	0	0	4	0	0	0
S-319	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0
S-981		RICHLAND CK									
S-067	SE	BRUSHY CK	FW	4	0	0	0	4	0	0	0
S-867		BRUSHY CK									
S-139		LAUREL CK									
RS-06167	RS06	UNNAMED TRIB TO REEDY RVR	FW	4	0	0	0	4	0	0	0
S-323	SPRP	REEDY RVR	FW	20	0	0	0	20	1	5	130
S-972		BALDWIN CK									
S-091	SE	ROCKY CK	FW	4	0	0	0	4	0	0	0
S-833		REEDY RVR									
S-982		HARRISON CK									
S-072	INT	REEDY RVR	FW	20	0	0	0	20	0	0	0
S-983		HUFF CK									
S-984		TRIBUTARY TO BAKER CK									
S-863		HUFF CK	FW	1	0	0	0				
S-178	INT	HUFF CK	FW	20	0	0	0	20	0	0	0
S-985		LITTLE CK									
S-834		REEDY RVR									
03050109-05											
S-859		MOUNTAIN CK									
S-321/ RS-02326	SE	N RABON CK	FW	7	0	0	0	7	0	0	0
RL-05411	RL05	LAKE RABON	FW	4	0	0	0	4	0	0	0
S-313	SE	LAKE RABON	FW	4	0	0	0	4	0	0	0
RL-02303	RL02	LAKE RABON	FW	4	0	0	0	4	0	0	0
S-860		S RABON CK									
S-322	SE	S RABON CK	FW	4	0	0	0	4	1	25	94
S-312/ RL-06425	SE	LAKE RABON	FW	7	0	0	0	7	0	0	0
RL-03359	RL03	LAKE RABON	FW	4	0	0	0	4	0	0	0
RL-02305	RL02	LAKE RABON	FW	4	0	0	0	4	0	0	0
S-296/ RL-04381	SUMM	LAKE RABON	FW	14	0	0	0	14	0	0	0
S-096	INT	RABON CK	FW	20	0	0	0	20	0	0	0
S-307	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0

STATION				DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-06													
S-835		REEDY RVR											
S-986		MARTIN CK											
S-778		REEDY RVR											
S-862		HORSE CK											
S-070	SE	REEDY RVR	FW	12	0	0	0	I	38	0.0725	I	38	0.0556
S-987		WARE SHOALS EAST #1											
RL-05403	RL05	LAKE, BOYD MILL POND	FW	12	0	0	0						
S-311	SUMM	LAKE, BOYD MILL POND	FW	30	0	0	0	D	93	-0.1732	D	82	-0.1077
S-861		WALNUT CK											
S-021	INT	REEDY RVR	FW	60	0	0	0	NS	189	0.025	I	186	0.075
S-308	SUMM	LAKE GREENWOOD	FW	31	0	0	0	NS	103	0.0177	NS	82	0
S-022	SE	LAKE GREENWOOD	FW	12	0	0	0	NS	63	0.0056	NS	55	0.0444
03050109-07													
RS-03346	RS03	ROCKY CREEK	FW	12	0	0	0						
S-092	SE	CORONACA CK	FW	8	0	0	0	D	79	-0.2823	I	77	0.0778
S-233	SE	WILSON CK	FW	8	0	0	0	NS	77	-0.0571	NS	74	0
S-235	SE	WILSON CK	FW	14	0	0	0	NS	81	-0.05	I	79	0.0875
S-856		NINETY SIX CK											
S-093	INT	NINETY SIX CK	FW	60	0	0	0	D	180	-0.0333	I	171	0.08
03050109-08													
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	12	0	0	0						
S-990		TRIBUTARY TO MOUNTAIN CK											
S-864		MOUNTAIN CK											
S-289	SE	BROAD MOUTH CK	FW	12	0	0	0	I	80	0.2108	D	79	-0.25
RS-04364	RS04	BROAD MOUTH CK	FW	12	0	0	0						
S-010	SE	BROAD MOUTH CK	FW	11	0	0	0	I	78	0.0546	NS	77	0.025
S-775		BROAD MOUTH CK											
S-304	INT	BROAD MOUTH CK	FW	59	0	0	0	NS	89	0.0092	I	80	0
S-125	INT	SALUDA RVR	FW	60	1	2	4.65	D	190	-0.0413	I	188	0.1
S-989		GIBSON CK											
S-858		TURKEY CK	FW	2	0	0	0						
S-024	INT	LAKE GREENWOOD	FW	60	0	0	0	NS	93	0	I	76	0.04
RL-02311	RL02	LAKE GREENWOOD	FW	12	0	0	0						
S-131	SE	LAKE GREENWOOD	FW	12	0	0	0	D	142	-0.0667	I	139	0.0472
S-097	SE	LAKE GREENWOOD	FW	12	0	0	0	D	82	-0.1167	NS	83	0.0563
RL-04387	RL04	LAKE GREENWOOD	FW	12	0	0	0						
S-303	INT	LAKE GREENWOOD	FW	60	0	0	0	I	95	0.06	I	78	0

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-06																	
S-835		REEDY RVR															
S-986		MARTIN CK															
S-778		REEDY RVR															
S-862		HORSE CK															
S-070	SE	REEDY RVR	FW	12	0	0	0	I	38	0.0778	11	1	9	55	NS	36	-1.225
S-987		WARE SHOALS EAST #1															
RL-05403	RL05	LAKE, BOYD MILL POND	FW	11	3	27	8.78				12	1	8	37			
S-311	SUMM	LAKE, BOYD MILL POND	FW	30	11	37	9.0827	NS	92	0	30	3	10	55.3333	NS	82	-0.0917
S-861		WALNUT CK															
S-021	INT	REEDY RVR	FW	59	0	0	0	NS	190	0	58	6	10	105.167	D	188	-0.3333
S-308	SUMM	LAKE GREENWOOD	FW	31	13	42	8.7954	NS	102	0.015	30	5	17	49.2	NS	82	-0.1181
S-022	SE	LAKE GREENWOOD	FW	12	6	50	8.8867	NS	63	-0.0138	11	2	18	39	D	53	-0.3111
03050109-07																	
RS-03346	RS03	ROCKY CREEK	FW	12	0	0	0				12	1	8	75			
S-092	SE	CORONACA CK	FW	8	0	0	0	D	79	-0.0592	8	1	13	79	I	79	1.39
S-233	SE	WILSON CK	FW	8	0	0	0	NS	78	0.0125	8	1	13	65	D	78	-0.6
S-235	SE	WILSON CK	FW	14	0	0	0	NS	83	0.0257	12	1	8	110	NS	81	-0.2
S-856		NINETY SIX CK															
S-093	INT	NINETY SIX CK	FW	59	1	2	10.3	I	179	0.0229	60	7	12	100.571	NS	180	0.0619
03050109-08																	
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	12	0	0	0				12	0	0	0			
S-990		TRIBUTARY TO MOUNTAIN CK															
S-864		MOUNTAIN CK															
S-289	SE	BROAD MOUTH CK	FW	12	0	0	0	NS	80	0.0333	12	1	8	54	NS	78	0
RS-04364	RS04	BROAD MOUTH CK	FW	12	0	0	0				12	1	8	110			
S-010	SE	BROAD MOUTH CK	FW	11	0	0	0	I	77	0.0354	11	1	9	96	NS	78	-0.2
S-775		BROAD MOUTH CK															
S-304	INT	BROAD MOUTH CK	FW	59	0	0	0	NS	88	0.0214	58	5	9	164	NS	87	-0.1667
S-125	INT	SALUDA RVR	FW	59	0	0	0	I	190	0.0167	58	3	5	82	D	189	-0.6382
S-989		GIBSON CK															
S-858		TURKEY CK	FW	2	0	0	0										
S-024	INT	LAKE GREENWOOD	FW	59	7	12	8.6586	NS	92	0.0167	57	9	16	56.8889	NS	79	-0.1111
RL-02311	RL02	LAKE GREENWOOD	FW	12	3	25	8.7833				11	2	18	42.5			
S-131	SE	LAKE GREENWOOD	FW	12	1	8	5.6	NS	141	0.0042	12	0	0	0	NS	140	-0.1333
S-097	SE	LAKE GREENWOOD	FW	12	0	0	0	NS	84	-0.0177	11	2	18	40.5	NS	81	0.4018
RL-04387	RL04	LAKE GREENWOOD	FW	12	1	8	8.65				12	1	8	26			
S-303	INT	LAKE GREENWOOD	FW	59	5	8	8.844	NS	92	0.0117	57	1	2	80	NS	80	-0.0273

STATION				TP	TP	TP	MEAN	TRENDS (92-2006)			TN	TN	TN	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TP	N	MAG	N	EXC.	%	EXC.	TN	N	MAG
03050109-06																	
S-835		REEDY RVR															
S-986		MARTIN CK															
S-778		REEDY RVR															
S-862		HORSE CK															
S-070	SE	REEDY RVR	FW												NS	32	-0.022
S-987		WARE SHOALS EAST #1															
RL-05403	RL05	LAKE, BOYD MILL POND	FW	12	7	58	0.0743				11	1	9	1.88			
S-311	SUMM	LAKE, BOYD MILL POND	FW	31	9	29	0.08	D	64	-0.0038	24	3	13	1.61	NS	67	-0.0059
S-861		WALNUT CK															
S-021	INT	REEDY RVR	FW					D	150	-0.0048					NS	164	-0.0024
S-308	SUMM	LAKE GREENWOOD	FW	30	12	40	0.0733	D	66	-0.0049	24	0	0	0	D	60	-0.0251
S-022	SE	LAKE GREENWOOD	FW	12	1	8	0.07	NS	43	-0.0067	11	0	0	0	NS	30	-0.0293
03050109-07																	
RS-03346	RS03	ROCKY CREEK	FW														
S-092	SE	CORONACA CK	FW					NS	52	-0.001							
S-233	SE	WILSON CK	FW					NS	51	-0.0041							
S-235	SE	WILSON CK	FW					NS	58	0.015							
S-856		NINETY SIX CK															
S-093	INT	NINETY SIX CK	FW					I	140	0.01					I	150	0.09
03050109-08																	
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW														
S-990		TRIBUTARY TO MOUNTAIN CK															
S-864		MOUNTAIN CK															
S-289	SE	BROAD MOUTH CK	FW					D	54	-0.02							
RS-04364	RS04	BROAD MOUTH CK	FW														
S-010	SE	BROAD MOUTH CK	FW					D	53	-0.01							
S-775		BROAD MOUTH CK															
S-304	INT	BROAD MOUTH CK	FW					NS	76	0					NS	68	0
S-125	INT	SALUDA RVR	FW					NS	148	-0.0004					I	160	0.0157
S-989		GIBSON CK															
S-858		TURKEY CK	FW														
S-024	INT	LAKE GREENWOOD	FW	59	3	5	0.2867	NS	74	-0.0004	45	0	0	0	NS	64	0.0063
RL-02311	RL02	LAKE GREENWOOD	FW	12	0	0	0				5	0	0	0			
S-131	SE	LAKE GREENWOOD	FW	12	0	0	0	NS	102	0	12	0	0	0	NS	132	0
S-097	SE	LAKE GREENWOOD	FW	12	2	17	0.07	I	58	0.0043	11	0	0	0			
RL-04387	RL04	LAKE GREENWOOD	FW	12	0	0	0				10	0	0	0			
S-303	INT	LAKE GREENWOOD	FW	60	1	2	0.37	NS	73	0	45	1	2	3.94	NS	64	0.0039

STATION				CHL	CHL	CHL	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TSS	N	MAG
03050109-06										
S-835		REEDY RVR								
S-986		MARTIN CK								
S-778		REEDY RVR								
S-862		HORSE CK								
S-070	SE	REEDY RVR	FW							
S-987		WARE SHOALS EAST #1								
RL-05403	RL05	LAKE, BOYD MILL POND	FW	5	0	0	0			
S-311	SUMM	LAKE, BOYD MILL POND	FW	29	1	3	82.7			
S-861		WALNUT CK								
S-021	INT	REEDY RVR	FW							
S-308	SUMM	LAKE GREENWOOD	FW	29	4	14	53.85			
S-022	SE	LAKE GREENWOOD	FW	6	0	0	0			
03050109-07										
RS-03346	RS03	ROCKY CREEK	FW							
S-092	SE	CORONACA CK	FW							
S-233	SE	WILSON CK	FW							
S-235	SE	WILSON CK	FW							
S-856		NINETY SIX CK								
S-093	INT	NINETY SIX CK	FW							
03050109-08										
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW							
S-990		TRIBUTARY TO MOUNTAIN CK								
S-864		MOUNTAIN CK								
S-289	SE	BROAD MOUTH CK	FW							
RS-04364	RS04	BROAD MOUTH CK	FW							
S-010	SE	BROAD MOUTH CK	FW							
S-775		BROAD MOUTH CK								
S-304	INT	BROAD MOUTH CK	FW							
S-125	INT	SALUDA RVR	FW					NS	97	0.3636
S-989		GIBSON CK								
S-858		TURKEY CK	FW							
S-024	INT	LAKE GREENWOOD	FW	28	0	0	0			
RL-02311	RL02	LAKE GREENWOOD	FW	6	0	0	0			
S-131	SE	LAKE GREENWOOD	FW	2	0	0	0			
S-097	SE	LAKE GREENWOOD	FW	6	0	0	0			
RL-04387	RL04	LAKE GREENWOOD	FW	6	0	0	0			
S-303	INT	LAKE GREENWOOD	FW	28	0	0	0			

STATION				GEO	BACT	BACT	BACT	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	MEAN	N	EXC.	%	EXC.	BACT	N	MAG
03050109-06											
S-835		REEDY RVR									
S-986		MARTIN CK									
S-778		REEDY RVR									
S-862		HORSE CK									
S-070	SE	REEDY RVR	FW	169.777	12	3	25	1003.3333	NS	38	-6.6667
S-987		WARE SHOALS EAST #1									
RL-05403	RL05	LAKE, BOYD MILL POND	FW	17.9382	12	0	0	0			
S-311	SUMM	LAKE, BOYD MILL POND	FW	19.9634	31	0	0	0	I	84	0.6458
S-861		WALNUT CK									
S-021	INT	REEDY RVR	FW	88.3454	59	7	12	1280	NS	190	-1.3667
S-308	SUMM	LAKE GREENWOOD	FW	18.4866	31	0	0	0	NS	83	0.3542
S-022	SE	LAKE GREENWOOD	FW	7.2888	12	0	0	0	NS	54	-0.2917
03050109-07											
RS-03346	RS03	ROCKY CREEK	FW	218.9906	12	6	50	1178.3333			
S-092	SE	CORONACA CK	FW	113.77	8	2	25	825	NS	78	-3.1905
S-233	SE	WILSON CK	FW	387.4342	8	4	50	852.5	NS	77	-3.3333
S-235	SE	WILSON CK	FW	262.8016	12	2	17	870	NS	79	-3.1667
S-856		NINETY SIX CK									
S-093	INT	NINETY SIX CK	FW	178.1228	60	11	18	1251.8182	NS	180	-2.5
03050109-08											
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	526.1371	12	7	58	922.8571			
S-990		TRIBUTARY TO MOUNTAIN CK									
S-864		MOUNTAIN CK									
S-289	SE	BROAD MOUTH CK	FW	342.2736	12	4	33	2502.5	I	78	25
RS-04364	RS04	BROAD MOUTH CK	FW	845.1435	12	8	67	2022.5			
S-010	SE	BROAD MOUTH CK	FW	444.1172	11	4	36	1620	NS	75	-47.5
S-775		BROAD MOUTH CK									
S-304	INT	BROAD MOUTH CK	FW	303.8742	59	16	27	2104.375	NS	89	-10
S-125	INT	SALUDA RVR	FW	83.8693	60	4	7	1230	NS	190	-0.9545
S-989		GIBSON CK									
S-858		TURKEY CK	FW								
S-024	INT	LAKE GREENWOOD	FW	18.6068	60	2	3	2300	NS	82	0.775
RL-02311	RL02	LAKE GREENWOOD	FW	6.5799	12	0	0	0			
S-131	SE	LAKE GREENWOOD	FW	4.3483	12	1	8	420	D	141	-8.8125
S-097	SE	LAKE GREENWOOD	FW	48.9935	12	0	0	0	NS	84	3.2667
RL-04387	RL04	LAKE GREENWOOD	FW	9.7169	12	0	0	0			
S-303	INT	LAKE GREENWOOD	FW	2.2469	60	0	0	0	NS	82	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-06															
S-835		REEDY RVR													
S-986		MARTIN CK													
S-778		REEDY RVR													
S-862		HORSE CK													
S-070	SE	REEDY RVR	FW	8	0	0	0	4	0	0	0	4	0	0	0
S-987		WARE SHOALS EAST #1													
RL-05403	RL05	LAKE, BOYD MILL POND	FW	12	0	0	0	4	0	0	0	4	0	0	0
S-311	SUMM	LAKE, BOYD MILL POND	FW	22	1	5	0.21	10	0	0	0	10	0	0	0
S-861		WALNUT CK													
S-021	INT	REEDY RVR	FW	43	0	0	0	20	0	0	0	20	1	5	92
S-308	SUMM	LAKE GREENWOOD	FW	22	1	5	0.26	10	0	0	0	10	0	0	0
S-022	SE	LAKE GREENWOOD	FW	9	1	11	0.31	4	0	0	0	4	0	0	0
03050109-07															
RS-03346	RS03	ROCKY CREEK	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-092	SE	CORONACA CK	FW	8	0	0	0	2	0	0	0	1	0	0	0
S-233	SE	WILSON CK	FW	8	0	0	0	2	0	0	0	2	0	0	0
S-235	SE	WILSON CK	FW	12	0	0	0	5	0	0	0	5	0	0	0
S-856		NINETY SIX CK													
S-093	INT	NINETY SIX CK	FW	47	1	2	0.14	20	0	0	0	20	0	0	0
03050109-08															
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-990		TRIBUTARY TO MOUNTAIN CK													
S-864		MOUNTAIN CK													
S-289	SE	BROAD MOUTH CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
RS-04364	RS04	BROAD MOUTH CK	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-010	SE	BROAD MOUTH CK	FW	9	0	0	0	4	0	0	0	4	1	25	56
S-775		BROAD MOUTH CK													
S-304	INT	BROAD MOUTH CK	FW	44	0	0	0	19	0	0	0	19	0	0	0
S-125	INT	SALUDA RVR	FW	42	0	0	0	20	0	0	0	20	0	0	0
S-989		GIBSON CK													
S-858		TURKEY CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
S-024	INT	LAKE GREENWOOD	FW	44	0	0	0	20	0	0	0	20	0	0	0
RL-02311	RL02	LAKE GREENWOOD	FW	5	0	0	0	4	0	0	0	4	0	0	0
S-131	SE	LAKE GREENWOOD	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-097	SE	LAKE GREENWOOD	FW	9	0	0	0	4	0	0	0	4	1	25	88
RL-04387	RL04	LAKE GREENWOOD	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-303	INT	LAKE GREENWOOD	FW	44	0	0	0	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-06															
S-835		REEDY RVR													
S-986		MARTIN CK													
S-778		REEDY RVR													
S-862		HORSE CK													
S-070	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-987		WARE SHOALS EAST #1													
RL-05403	RL05	LAKE, BOYD MILL POND	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-311	SUMM	LAKE, BOYD MILL POND	FW	10	0	0	0	10	0	0	0	10	0	0	0
S-861		WALNUT CK													
S-021	INT	REEDY RVR	FW	20	1	5	35	20	0	0	0	20	0	0	0
S-308	SUMM	LAKE GREENWOOD	FW	10	0	0	0	10	0	0	0	10	0	0	0
S-022	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0	4	0	0	0
03050109-07															
RS-03346	RS03	ROCKY CREEK	FW	4	1	25	12	4	0	0	0	4	0	0	0
S-092	SE	CORONACA CK	FW	2	0	0	0	2	0	0	0	2	0	0	0
S-233	SE	WILSON CK	FW	2	1	50	46	2	0	0	0	2	0	0	0
S-235	SE	WILSON CK	FW	5	0	0	0	5	0	0	0	5	0	0	0
S-856		NINETY SIX CK													
S-093	INT	NINETY SIX CK	FW	20	3	15	158.6667	20	1	5	76	20	0	0	0
03050109-08															
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-990		TRIBUTARY TO MOUNTAIN CK													
S-864		MOUNTAIN CK													
S-289	SE	BROAD MOUTH CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
RS-04364	RS04	BROAD MOUTH CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-010	SE	BROAD MOUTH CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-775		BROAD MOUTH CK													
S-304	INT	BROAD MOUTH CK	FW	19	0	0	0	19	0	0	0	19	0	0	0
S-125	INT	SALUDA RVR	FW	20	0	0	0	20	0	0	0	20	0	0	0
S-989		GIBSON CK													
S-858		TURKEY CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
S-024	INT	LAKE GREENWOOD	FW	20	0	0	0	20	0	0	0	20	0	0	0
RL-02311	RL02	LAKE GREENWOOD	FW	4	1	25	11	4	0	0	0	4	1	25	11
S-131	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-097	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-04387	RL04	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-303	INT	LAKE GREENWOOD	FW	20	2	10	24	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-06											
S-835		REEDY RVR									
S-986		MARTIN CK									
S-778		REEDY RVR									
S-862		HORSE CK									
S-070	SE	REEDY RVR	FW	4	0	0	0	4	0	0	0
S-987		WARE SHOALS EAST #1									
RL-05403	RL05	LAKE, BOYD MILL POND	FW	4	0	0	0	4	0	0	0
S-311	SUMM	LAKE, BOYD MILL POND	FW	10	0	0	0	10	0	0	0
S-861		WALNUT CK									
S-021	INT	REEDY RVR	FW	20	1	5	27	20	0	0	0
S-308	SUMM	LAKE GREENWOOD	FW	10	0	0	0	10	0	0	0
S-022	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0
03050109-07											
RS-03346	RS03	ROCKY CREEK	FW	4	0	0	0	4	0	0	0
S-092	SE	CORONACA CK	FW	1	0	0	0	2	0	0	0
S-233	SE	WILSON CK	FW	2	0	0	0	2	0	0	0
S-235	SE	WILSON CK	FW	5	0	0	0	4	0	0	0
S-856		NINETY SIX CK									
S-093	INT	NINETY SIX CK	FW	20	1	5	60	20	1	5	2000
03050109-08											
RS-06030	RS06	UNNAMED TRIB TO SALUDA RVR	FW	4	0	0	0	4	0	0	0
S-990		TRIBUTARY TO MOUNTAIN CK									
S-864		MOUNTAIN CK									
S-289	SE	BROAD MOUTH CK	FW	4	0	0	0	4	0	0	0
RS-04364	RS04	BROAD MOUTH CK	FW	4	0	0	0	4	0	0	0
S-010	SE	BROAD MOUTH CK	FW	4	1	25	89	4	0	0	0
S-775		BROAD MOUTH CK									
S-304	INT	BROAD MOUTH CK	FW	19	0	0	0	19	0	0	0
S-125	INT	SALUDA RVR	FW	20	0	0	0	20	0	0	0
S-989		GIBSON CK									
S-858		TURKEY CK	FW	1	0	0	0				
S-024	INT	LAKE GREENWOOD	FW	20	0	0	0	20	0	0	0
RL-02311	RL02	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0
S-131	SE	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0
S-097	SE	LAKE GREENWOOD	FW	4	1	25	26	4	0	0	0
RL-04387	RL04	LAKE GREENWOOD	FW	4	0	0	0	4	0	0	0
S-303	INT	LAKE GREENWOOD	FW	20	0	0	0	20	0	0	0

STATION				DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-09													
S-034	SE	LITTLE RVR	FW	12	0	0	0	NS	137	0	NS	141	0.025
S-297	SE	LITTLE RVR	FW	12	0	0	0	NS	81	0.0333	NS	82	0
S-135	SE	NORTH CK	FW	12	0	0	0	NS	80	0.018	I	82	0.075
RS-05400	RS05	BEAVERDAM CK	FW	11	0	0	0						
S-099	INAC	LITTLE RVR	FW	24	0	0	0	NS	93	0	I	89	0.0667
S-100		LITTLE RVR											
RS-04526	RS04	MUDLICK CK	FW	12	0	0	0						
03050109-10													
S-255	SE	CLOUDS CK	FW	9	0	0	0	NS	70	-0.125	I	72	0.1
RS-05398	RS05	WEST CK	FW	10	0	0	0						
S-324	INT	CLOUDS CK	FW	43	1	2	4.3	NS	53	0.1183	D	53	-0.0417
03050109-11													
S-050	SE	LITTLE SALUDA RVR	FW	10	4	40	4.24	NS	78	-0.0714	NS	81	0
S-123	INT	LITTLE SALUDA RVR	FW	53	14	26	3.9771	D	179	-0.0681	I	178	0.05
RS-05590	RS05	BIG CK	FW	9	0	0	0						
S-222	SE	LAKE MURRAY	FW	47	0	0	0	NS	77	-0.0433	NS	74	0
03050109-12													
S-295	SE	SALUDA RVR	FW	12	0	0	0	NS	143	-0.02	I	139	0.1
S-047	INT	SALUDA RVR	FW	60	0	0	0	NS	90	0.0036	I	85	0
S-852		BEAVERDAM CK	FW	1	0	0	0						
S-310	INT	LAKE MURRAY	FW	24	0	0	0	D	52	-0.163	NS	50	0
S-042	SE	BUSH RVR	FW	12	5	42	2.574	D	141	-0.0817	NS	138	0
S-046	SE	BUSH RVR	FW	12	0	0	0	NS	83	-0.0146	NS	80	0.0125
S-044	SE	SCOTT CK	FW	12	2	17	4.005	D	83	-0.1183	NS	81	-0.0167
S-851		BUSH RVR											
S-102	SE	BUSH RVR	FW	12	0	0	0	NS	58	0.015	NS	56	0.0056
S-309	SUMM	LAKE MURRAY	FW	14	1	7	3.96	D	56	-0.23	NS	50	0.1
S-223	SE	LAKE MURRAY	FW	46	0	0	0	NS	182	-0.0067	NS	172	0

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-09																	
S-034	SE	LITTLE RVR	FW	12	0	0	0	NS	142	-0.0037	12	0	0	0	NS	140	-0.0393
S-297	SE	LITTLE RVR	FW	12	0	0	0	NS	82	0	12	0	0	0	NS	81	-0.52
S-135	SE	NORTH CK	FW	12	0	0	0	NS	82	-0.0146	12	0	0	0	NS	80	-0.0333
RS-05400	RS05	BEAVERDAM CK	FW	10	0	0	0				10	0	0	0			
S-099	INAC	LITTLE RVR	FW	24	0	0	0	NS	93	0.016	24	3	13	230	NS	92	-0.0556
S-100		LITTLE RVR															
RS-04526	RS04	MUDLICK CK	FW	12	0	0	0				12	1	8	420			
03050109-10																	
S-255	SE	CLOUDS CK	FW	9	1	11	5.5	NS	72	-0.0094	9	0	0	0	NS	71	-0.3333
RS-05398	RS05	WEST CK	FW	11	1	9	5.7				11	0	0	0			
S-324	INT	CLOUDS CK	FW	43	0	0	0	NS	53	0.1117	43	0	0	0	NS	53	0
03050109-11																	
S-050	SE	LITTLE SALUDA RVR	FW	10	0	0	0	NS	80	-0.0121	10	0	0	0	NS	80	-0.5111
S-123	INT	LITTLE SALUDA RVR	FW	54	2	4	5.285	NS	182	-0.009	54	2	4	55	D	184	-0.525
RS-05590	RS05	BIG CK	FW	9	1	11	5.84				9	1	11	91			
S-222	SE	LAKE MURRAY	FW	47	6	13	8.27	D	77	-0.04	48	6	13	48.3333	NS	75	-0.0357
03050109-12																	
S-295	SE	SALUDA RVR	FW	12	0	0	0	NS	144	-0.0125	12	0	0	0	NS	140	-0.1
S-047	INT	SALUDA RVR	FW	60	0	0	0	NS	90	-0.0136	60	4	7	95	NS	90	0.25
S-852		BEAVERDAM CK	FW	1	0	0	0										
S-310	INT	LAKE MURRAY	FW	24	3	13	8.92	D	52	-0.08	24	0	0	0	NS	50	0.18
S-042	SE	BUSH RVR	FW	12	0	0	0	NS	141	0.02	12	0	0	0	D	139	-0.5667
S-046	SE	BUSH RVR	FW	12	0	0	0	NS	83	0.0193	12	2	17	92.5	NS	83	-0.0675
S-044	SE	SCOTT CK	FW	12	0	0	0	NS	83	0.0216	12	1	8	95	NS	83	-0.19
S-851		BUSH RVR															
S-102	SE	BUSH RVR	FW	12	0	0	0	NS	58	0.0267	12	1	8	150	NS	58	-0.63
S-309	SUMM	LAKE MURRAY	FW	14	1	7	8.6	D	56	-0.06	14	0	0	0	NS	50	0
S-223	SE	LAKE MURRAY	FW	46	2	4	8.685	NS	182	0.01	46	6	13	34.1667	NS	171	-0.0571

STATION				TP	TP	TP	MEAN	TRENDS (92-2006)			TN	TN	TN	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TP	N	MAG	N	EXC.	%	EXC.	TN	N	MAG
03050109-09																	
S-034	SE	LITTLE RVR	FW					NS	104	0					D	132	-0.0167
S-297	SE	LITTLE RVR	FW					NS	58	-0.01							
S-135	SE	NORTH CK	FW					NS	59	0							
RS-05400	RS05	BEAVERDAM CK	FW														
S-099	INAC	LITTLE RVR	FW					NS	67	0							
S-100		LITTLE RVR															
RS-04526	RS04	MUDLICK CK	FW														
03050109-10																	
S-255	SE	CLOUDS CK	FW					NS	55	0.0101							
RS-05398	RS05	WEST CK	FW														
S-324	INT	CLOUDS CK	FW					NS	43	-0.03					NS	35	-0.02
03050109-11																	
S-050	SE	LITTLE SALUDA RVR	FW					NS	58	-0.02					NS	44	0.0733
S-123	INT	LITTLE SALUDA RVR	FW					D	148	-0.002					D	162	-0.0206
RS-05590	RS05	BIG CK	FW														
S-222	SE	LAKE MURRAY	FW	48	18	38	0.0989	D	66	-0.0017	38	2	5	1.96	D	60	-0.0242
03050109-12																	
S-295	SE	SALUDA RVR	FW					NS	103	0					I	133	0.0225
S-047	INT	SALUDA RVR	FW					NS	77	0.0009					NS	68	0.0078
S-852		BEAVERDAM CK	FW														
S-310	INT	LAKE MURRAY	FW	24	1	4	0.06	NS	41	-0.0006	19	0	0	0	NS	41	-0.009
S-042	SE	BUSH RVR	FW					D	102	-0.0241					D	129	-0.1768
S-046	SE	BUSH RVR	FW					NS	60	-0.0059							
S-044	SE	SCOTT CK	FW					NS	60	-0.0013							
S-851		BUSH RVR															
S-102	SE	BUSH RVR	FW					I	44	0.064							
S-309	SUMM	LAKE MURRAY	FW	14	10	71	0.119	NS	36	0	12	0	0	0	NS	46	-0.02
S-223	SE	LAKE MURRAY	FW	47	4	9	0.0775	D	141	-0.0009	37	0	0	0	NS	157	0.0007

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050109-09										
S-034	SE	LITTLE RVR	FW							
S-297	SE	LITTLE RVR	FW							
S-135	SE	NORTH CK	FW							
RS-05400	RS05	BEAVERDAM CK	FW							
S-099	INAC	LITTLE RVR	FW							
S-100		LITTLE RVR								
RS-04526	RS04	MUDLICK CK	FW							
03050109-10										
S-255	SE	CLOUDS CK	FW							
RS-05398	RS05	WEST CK	FW							
S-324	INT	CLOUDS CK	FW							
03050109-11										
S-050	SE	LITTLE SALUDA RVR	FW							
S-123	INT	LITTLE SALUDA RVR	FW							
RS-05590	RS05	BIG CK	FW							
S-222	SE	LAKE MURRAY	FW	23	4	17	49.2475			
03050109-12										
S-295	SE	SALUDA RVR	FW							
S-047	INT	SALUDA RVR	FW							
S-852		BEAVERDAM CK	FW							
S-310	INT	LAKE MURRAY	FW	12	0	0	0			
S-042	SE	BUSH RVR	FW					NS	74	-0.25
S-046	SE	BUSH RVR	FW					NS	40	0.2917
S-044	SE	SCOTT CK	FW							
S-851		BUSH RVR								
S-102	SE	BUSH RVR	FW							
S-309	SUMM	LAKE MURRAY	FW	12	9	75	58.3078			
S-223	SE	LAKE MURRAY	FW	23	1	4	40.91			

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050109-09											
S-034	SE	LITTLE RVR	FW	91.2153	12	0	0	0	NS	140	-15
S-297	SE	LITTLE RVR	FW	178.0043	12	3	25	623.3333	NS	81	-28.5714
S-135	SE	NORTH CK	FW	259.0558	12	4	33	652.5	NS	82	1
RS-05400	RS05	BEAVERDAM CK	FW	427.2007	11	5	45	1090			
S-099	INAC	LITTLE RVR	FW	273.5198	24	4	17	3525	NS	93	-6.6667
S-100		LITTLE RVR									
RS-04526	RS04	MUDLICK CK	FW	226.517	12	2	17	4170			
03050109-10											
S-255	SE	CLOUDS CK	FW	243.0728	9	1	11	540	NS	74	0
RS-05398	RS05	WEST CK	FW	218.7109	11	4	36	497.5			
S-324	INT	CLOUDS CK	FW	86.6592	43	7	16	907.1429	NS	54	5.3333
03050109-11											
S-050	SE	LITTLE SALUDA RVR	FW	143.0297	10	1	10	600	NS	80	0
S-123	INT	LITTLE SALUDA RVR	FW	176.9159	54	11	20	864.5455	D	184	-6
RS-05590	RS05	BIG CK	FW	261.2724	9	3	33	560			
S-222	SE	LAKE MURRAY	FW	9.5118	48	2	4	2550	NS	78	0
03050109-12											
S-295	SE	SALUDA RVR	FW	52.0228	12	1	8	1200	NS	144	1
S-047	INT	SALUDA RVR	FW	85.2334	60	8	13	1808.75	NS	89	-1
S-852		BEAVERDAM CK	FW								
S-310	INT	LAKE MURRAY	FW	13.2482	24	0	0	0	NS	53	0
S-042	SE	BUSH RVR	FW	73.6219	12	0	0	0	D	141	-15
S-046	SE	BUSH RVR	FW	517.0144	40	15	38	5241.3333	NS	115	-5
S-044	SE	SCOTT CK	FW	433.3994	12	6	50	1248.3333	D	84	-80
S-851		BUSH RVR									
S-102	SE	BUSH RVR	FW	501.0201	40	17	43	3512.3529	NS	88	-3.3333
S-309	SUMM	LAKE MURRAY	FW	15.1444	14	1	7	660	NS	53	0
S-223	SE	LAKE MURRAY	FW	13.4407	47	2	4	600	NS	177	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-09															
S-034	SE	LITTLE RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-297	SE	LITTLE RVR	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-135	SE	NORTH CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
RS-05400	RS05	BEAVERDAM CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-099	INAC	LITTLE RVR	FW	22	0	0	0	8	0	0	0	8	0	0	0
S-100		LITTLE RVR													
RS-04526	RS04	MUDLICK CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
03050109-10															
S-255	SE	CLOUDS CK	FW	8	0	0	0	2	0	0	0	2	0	0	0
RS-05398	RS05	WEST CK	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-324	INT	CLOUDS CK	FW	29	0	0	0	14	0	0	0	14	0	0	0
03050109-11															
S-050	SE	LITTLE SALUDA RVR	FW	10	0	0	0	3	0	0	0	3	0	0	0
S-123	INT	LITTLE SALUDA RVR	FW	45	0	0	0	17	0	0	0	17	0	0	0
RS-05590	RS05	BIG CK	FW	9	0	0	0	3	0	0	0	3	0	0	0
S-222	SE	LAKE MURRAY	FW	40	0	0	0	16	0	0	0	16	0	0	0
03050109-12															
S-295	SE	SALUDA RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-047	INT	SALUDA RVR	FW	42	0	0	0	20	0	0	0	20	0	0	0
S-852		BEAVERDAM CK	FW												
S-310	INT	LAKE MURRAY	FW	21	0	0	0	8	0	0	0	8	0	0	0
S-042	SE	BUSH RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-046	SE	BUSH RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-044	SE	SCOTT CK	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-851		BUSH RVR													
S-102	SE	BUSH RVR	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-309	SUMM	LAKE MURRAY	FW	13	0	0	0	5	0	0	0	5	0	0	0
S-223	SE	LAKE MURRAY	FW	39	0	0	0	16	0	0	0	16	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-09															
S-034	SE	LITTLE RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-297	SE	LITTLE RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-135	SE	NORTH CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
RS-05400	RS05	BEAVERDAM CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-099	INAC	LITTLE RVR	FW	8	1	13	12	8	0	0	0	8	0	0	0
S-100		LITTLE RVR													
RS-04526	RS04	MUDLICK CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
03050109-10															
S-255	SE	CLOUDS CK	FW	2	0	0	0	2	0	0	0	2	0	0	0
RS-05398	RS05	WEST CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-324	INT	CLOUDS CK	FW	14	0	0	0	13	0	0	0	14	0	0	0
03050109-11															
S-050	SE	LITTLE SALUDA RVR	FW	3	0	0	0	3	0	0	0	3	0	0	0
S-123	INT	LITTLE SALUDA RVR	FW	17	1	6	20	17	0	0	0	17	0	0	0
RS-05590	RS05	BIG CK	FW	3	0	0	0	3	0	0	0	3	0	0	0
S-222	SE	LAKE MURRAY	FW	16	0	0	0	16	0	0	0	16	0	0	0
03050109-12															
S-295	SE	SALUDA RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-047	INT	SALUDA RVR	FW	20	0	0	0	20	0	0	0	20	0	0	0
S-852		BEAVERDAM CK	FW												
S-310	INT	LAKE MURRAY	FW	8	0	0	0	8	0	0	0	8	0	0	0
S-042	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-046	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-044	SE	SCOTT CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-851		BUSH RVR													
S-102	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-309	SUMM	LAKE MURRAY	FW	5	0	0	0	5	0	0	0	5	0	0	0
S-223	SE	LAKE MURRAY	FW	16	0	0	0	16	0	0	0	16	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-09											
S-034	SE	LITTLE RVR	FW	4	0	0	0	4	0	0	0
S-297	SE	LITTLE RVR	FW	4	0	0	0	4	0	0	0
S-135	SE	NORTH CK	FW	4	0	0	0	4	0	0	0
RS-05400	RS05	BEAVERDAM CK	FW	4	0	0	0	4	0	0	0
S-099	INAC	LITTLE RVR	FW	8	0	0	0	8	1	13	90
S-100		LITTLE RVR									
RS-04526	RS04	MUDLICK CK	FW	4	0	0	0	4	0	0	0
03050109-10											
S-255	SE	CLOUDS CK	FW	2	0	0	0	2	0	0	0
RS-05398	RS05	WEST CK	FW	4	0	0	0	4	0	0	0
S-324	INT	CLOUDS CK	FW	14	0	0	0	14	0	0	0
03050109-11											
S-050	SE	LITTLE SALUDA RVR	FW	3	0	0	0	3	0	0	0
S-123	INT	LITTLE SALUDA RVR	FW	17	0	0	0	17	0	0	0
RS-05590	RS05	BIG CK	FW	3	0	0	0	3	0	0	0
S-222	SE	LAKE MURRAY	FW	16	0	0	0	16	0	0	0
03050109-12											
S-295	SE	SALUDA RVR	FW	4	0	0	0	4	1	25	150
S-047	INT	SALUDA RVR	FW	20	0	0	0	20	0	0	0
S-852		BEAVERDAM CK	FW								
S-310	INT	LAKE MURRAY	FW	8	0	0	0	8	0	0	0
S-042	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0
S-046	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0
S-044	SE	SCOTT CK	FW	4	0	0	0	4	0	0	0
S-851		BUSH RVR									
S-102	SE	BUSH RVR	FW	4	0	0	0	4	0	0	0
S-309	SUMM	LAKE MURRAY	FW	5	0	0	0	5	0	0	0
S-223	SE	LAKE MURRAY	FW	16	1	6	35	16	0	0	0

STATION				DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050109-13													
RL-05420	RL05	LAKE MURRAY	FW	12	0	0	0						
S-279/ RL-02318	SE	LAKE MURRAY	FW	24	0	0	0	NS	159	0.0009	NS	145	0
S-211	SE	LAKE MURRAY	FW	12	0	0	0	I	82	0.0917	NS	81	-0.05
S-212	SE	LAKE MURRAY	FW	12	0	0	0	NS	82	0.0667	NS	81	0
S-977		HOLLOW CK	FW										
S-976		HOLLOW CK	FW										
S-978		LITTLE CK	FW										
S-975		HOLLOW CK	FW										
S-306	INT	HOLLOW CK	FW	59	1	2	4.05	NS	86	-0.0133	NS	83	0
S-974		HOLLOW CK	FW										
S-973		LAKE MURRAY	FW										
RL-04372	RL04	LAKE MURRAY	FW	12	1	8	4.76						
S-280	SE	LAKE MURRAY	FW	12	0	0	0	NS	151	-0.0222	NS	133	0.02
S-290	SE	CAMPING CK	FW	12	1	8	4.03	NS	140	-0.0267	NS	134	0
S-850		CAMPING CK											
S-213	SE	LAKE MURRAY	FW	12	0	0	0	NS	81	0.075	NS	80	0
RL-05418	RL05	LAKE MURRAY	FW	12	0	0	0						
RL-05410	RL05	LAKE MURRAY	FW	12	0	0	0						
RL-03338	RL03	LAKE MURRAY	FW	11	0	0	0						
RL-06440	RL06	LAKE MURRAY	FW	12	0	0	0						
S-273/ RL-04460	SE	LAKE MURRAY	FW	24	0	0	0	NS	161	0.0195	I	144	0.0423
RL-03334	RL03	LAKE MURRAY	FW	11	0	0	0						
S-274	SE	LAKE MURRAY	FW	12	0	0	0	NS	151	0.0039	NS	134	0
RL-06442	RL06	LAKE MURRAY	FW	12	0	0	0						
RL-02316	RL02	LAKE MURRAY	FW	12	0	0	0						
S-204	SE	LAKE MURRAY	FW	12	0	0	0	NS	153	0	NS	135	0.0125
CL-083	INT	LAKE MURRAY	FW	59	2	3	4.435	NS	70	0.085	NS	70	0
03050109-14													
S-152	SE	SALUDA RVR	TPGT-SP	12	0	0	0	I	76	0.3586	NS	78	0.025
S-287	SE	RAWLS CK	FW	14	0	0	0	NS	81	-0.025	NS	81	-0.025
S-149	SE	SALUDA RVR	TPGT-SP	11	0	0	0	I	77	0.2528	NS	77	0.0333
S-150	SE	LORICK BRANCH	FW	12	6	50	3.5633	NS	78	0.025	NS	76	0.05
S-052		TWELVE MILE CK											
RS-02457	RS02	TWELVEMILE CK	FW	12	0	0	0						
S-294	SE	TWELVEMILE CK	FW	12	0	0	0	NS	140	0.0356	NS	135	0
S-848		FOURTEEN MILE CK											
S-260	SE	KINLEY CK	FW	12	0	0	0	D	80	-0.3344	NS	81	-0.02
S-298	INT	SALUDA RVR	TPGT-SP	60	0	0	0	I	185	0.0823	I	183	0.0375

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050109-13																	
RL-05420	RL05	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
S-279/ RL-02318	SE	LAKE MURRAY	FW	24	1	4	8.74	I	160	0.054	24	0	0	0	D	146	-0.2
S-211	SE	LAKE MURRAY	FW	12	1	8	8.74	I	82	0.1125	12	0	0	0	NS	82	-0.069
S-212	SE	LAKE MURRAY	FW	12	3	25	8.8633	I	82	0.09	12	0	0	0	NS	82	0.0817
S-977		HOLLOW CK	FW														
S-976		HOLLOW CK	FW														
S-978		LITTLE CK	FW														
S-975		HOLLOW CK	FW														
S-306	INT	HOLLOW CK	FW	59	0	0	0	NS	86	0.02	59	8	14	324.75	NS	87	0.25
S-974		HOLLOW CK	FW														
S-973		LAKE MURRAY	FW														
RL-04372	RL04	LAKE MURRAY	FW	12	1	8	8.52				12	0	0	0			
S-280	SE	LAKE MURRAY	FW	12	0	0	0	I	152	0.0421	12	0	0	0	D	136	-0.0857
S-290	SE	CAMPING CK	FW	12	0	0	0	I	140	0.0322	12	1	8	290	D	135	-0.4143
S-850		CAMPING CK															
S-213	SE	LAKE MURRAY	FW	12	0	0	0	I	82	0.065	12	0	0	0	NS	81	-0.05
RL-05418	RL05	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
RL-05410	RL05	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
RL-03338	RL03	LAKE MURRAY	FW	11	0	0	0				12	0	0	0			
RL-06440	RL06	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
S-273/ RL-04460	SE	LAKE MURRAY	FW	24	0	0	0	I	162	0.04	24	0	0	0	D	148	-0.05
RL-03334	RL03	LAKE MURRAY	FW	11	0	0	0				12	0	0	0			
S-274	SE	LAKE MURRAY	FW	12	0	0	0	I	152	0.0467	12	0	0	0	D	139	-0.069
RL-06442	RL06	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
RL-02316	RL02	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
S-204	SE	LAKE MURRAY	FW	12	0	0	0	I	151	0.0462	12	0	0	0	D	137	-0.075
CL-083	INT	LAKE MURRAY	FW	59	2	3	8.91	NS	70	0.0342	60	0	0	0	NS	70	0.0633
03050109-14																	
S-152	SE	SALUDA RVR	TPGT-SP	12	0	0	0	I	76	0.0492	12	0	0	0	D	77	-0.2175
S-287	SE	RAWLS CK	FW	14	0	0	0	NS	81	0.0238	12	4	33	102	D	81	-0.975
S-149	SE	SALUDA RVR	TPGT-SP	11	0	0	0	I	77	0.05	11	3	27	22	NS	78	-0.2
S-150	SE	LORICK BRANCH	FW	12	0	0	0	I	78	0.054	12	0	0	0	D	77	-0.4
S-052		TWELVE MILE CK															
RS-02457	RS02	TWELVEMILE CK	FW	12	0	0	0				12	0	0	0			
S-294	SE	TWELVEMILE CK	FW	12	0	0	0	I	140	0.0657	12	0	0	0	NS	138	-0.05
S-848		FOURTEEN MILE CK															
S-260	SE	KINLEY CK	FW	12	0	0	0	NS	80	-0.0221	12	0	0	0	NS	81	0.1
S-298	INT	SALUDA RVR	TPGT-SP	60	2	3	8.16	I	185	0.0315	60	9	15	20.7778	D	187	-0.1273

STATION				TP	TP	TP	MEAN	TRENDS (92-2006)			TN	TN	TN	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TP	N	MAG	N	EXC.	%	EXC.	TN	N	MAG
03050109-13																	
RL-05420	RL05	LAKE MURRAY	FW	12	1	8	0.07				12	0	0	0			
S-279/ RL-02318	SE	LAKE MURRAY	FW	24	0	0	0	D	114	-0.0011	18	0	0	0	D	134	-0.01
S-211	SE	LAKE MURRAY	FW	12	0	0	0	D	57	-0.0003	11	0	0	0			
S-212	SE	LAKE MURRAY	FW	12	0	0	0	D	57	-0.0001	11	0	0	0			
S-977		HOLLOW CK	FW														
S-976		HOLLOW CK	FW														
S-978		LITTLE CK	FW														
S-975		HOLLOW CK	FW														
S-306	INT	HOLLOW CK	FW					NS	76	0.0015					NS	66	0.005
S-974		HOLLOW CK	FW														
S-973		LAKE MURRAY	FW														
RL-04372	RL04	LAKE MURRAY	FW	12	1	8	0.25				10	0	0	0			
S-280	SE	LAKE MURRAY	FW	12	0	0	0	NS	103	0	10	0	0	0	D	128	-0.012
S-290	SE	CAMPING CK	FW					NS	98	-0.0033					NS	126	-0.0025
S-850		CAMPING CK															
S-213	SE	LAKE MURRAY	FW	12	0	0	0	D	54	-0.0002	11	0	0	0			
RL-05418	RL05	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
RL-05410	RL05	LAKE MURRAY	FW	12	0	0	0				12	0	0	0			
RL-03338	RL03	LAKE MURRAY	FW	11	0	0	0				6	0	0	0			
RL-06440	RL06	LAKE MURRAY	FW	11	0	0	0				11	0	0	0			
S-273/ RL-04460	SE	LAKE MURRAY	FW	24	0	0	0	D	113	0	22	0	0	0	D	140	-0.01
RL-03334	RL03	LAKE MURRAY	FW	12	0	0	0				6	0	0	0			
S-274	SE	LAKE MURRAY	FW	12	0	0	0	D	105	0	11	0	0	0	D	131	-0.01
RL-06442	RL06	LAKE MURRAY	FW	12	0	0	0				11	0	0	0			
RL-02316	RL02	LAKE MURRAY	FW	12	0	0	0				9	0	0	0			
S-204	SE	LAKE MURRAY	FW	12	1	8	0.14	D	103	0	11	0	0	0	D	129	-0.012
CL-083	INT	LAKE MURRAY	FW	60	1	2	0.1	NS	60	0	49	0	0	0	NS	53	0.02
03050109-14																	
S-152	SE	SALUDA RVR	TPGT-SP					NS	56	0							
S-287	SE	RAWLS CK	FW					NS	60	0							
S-149	SE	SALUDA RVR	TPGT-SP					NS	56	0							
S-150	SE	LORICK BRANCH	FW					D	56	-0.03							
S-052		TWELVE MILE CK															
RS-02457	RS02	TWELVEMILE CK	FW														
S-294	SE	TWELVEMILE CK	FW					NS	102	0					NS	132	0.0154
S-848		FOURTEEN MILE CK															
S-260	SE	KINLEY CK	FW					I	58	0.0079							
S-298	INT	SALUDA RVR	TPGT-SP					D	151	-0.002					NS	163	-0.0031

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050109-13										
RL-05420	RL05	LAKE MURRAY	FW	5	0	0	0			
S-279/ RL-02318	SE	LAKE MURRAY	FW	12	0	0	0			
S-211	SE	LAKE MURRAY	FW	5	0	0	0			
S-212	SE	LAKE MURRAY	FW	5	0	0	0			
S-977		HOLLOW CK	FW							
S-976		HOLLOW CK	FW							
S-978		LITTLE CK	FW							
S-975		HOLLOW CK	FW							
S-306	INT	HOLLOW CK	FW							
S-974		HOLLOW CK	FW							
S-973		LAKE MURRAY	FW							
RL-04372	RL04	LAKE MURRAY	FW	6	0	0	0			
S-280	SE	LAKE MURRAY	FW	6	0	0	0			
S-290	SE	CAMPING CK	FW					NS	72	-0.25
S-850		CAMPING CK								
S-213	SE	LAKE MURRAY	FW	5	0	0	0			
RL-05418	RL05	LAKE MURRAY	FW	5	0	0	0			
RL-05410	RL05	LAKE MURRAY	FW	5	0	0	0			
RL-03338	RL03	LAKE MURRAY	FW	5	0	0	0			
RL-06440	RL06	LAKE MURRAY	FW	6	0	0	0			
S-273/ RL-04460	SE	LAKE MURRAY	FW	12	0	0	0			
RL-03334	RL03	LAKE MURRAY	FW	7	0	0	0			
S-274	SE	LAKE MURRAY	FW	6	0	0	0			
RL-06442	RL06	LAKE MURRAY	FW	6	0	0	0			
RL-02316	RL02	LAKE MURRAY	FW	6	0	0	0			
S-204	SE	LAKE MURRAY	FW	6	0	0	0			
CL-083	INT	LAKE MURRAY	FW	28	0	0	0			
03050109-14										
S-152	SE	SALUDA RVR	TPGT-SP					I	37	0.2
S-287	SE	RAWLS CK	FW					I	41	1
S-149	SE	SALUDA RVR	TPGT-SP					I	40	0.275
S-150	SE	LORICK BRANCH	FW					NS	39	0
S-052		TWELVE MILE CK								
RS-02457	RS02	TWELVEMILE CK	FW							
S-294	SE	TWELVEMILE CK	FW					NS	84	0
S-848		FOURTEEN MILE CK								
S-260	SE	KINLEY CK	FW					I	39	2.276
S-298	INT	SALUDA RVR	TPGT-SP					I	71	0.3333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050109-13											
RL-05420	RL05	LAKE MURRAY	FW	5.4401	12	0	0	0			
S-279/ RL-02318	SE	LAKE MURRAY	FW	1.9752	24	0	0	0	D	151	-0.1429
S-211	SE	LAKE MURRAY	FW	5.188	12	0	0	0	NS	81	0
S-212	SE	LAKE MURRAY	FW	10.309	12	0	0	0	NS	82	0.0714
S-977		HOLLOW CK	FW	660.7322	5	3	60	1973.3333			
S-976		HOLLOW CK	FW	729.0204	5	4	80	955			
S-978		LITTLE CK	FW	182.5547	5	0	0	0			
S-975		HOLLOW CK	FW	225.264	5	1	20	930			
S-306	INT	HOLLOW CK	FW	799.9013	64	48	75	3432.9167	NS	93	25
S-974		HOLLOW CK	FW	80.031	5	0	0	0			
S-973		LAKE MURRAY	FW	4.8194	5	0	0	0			
RL-04372	RL04	LAKE MURRAY	FW	2.618	12	0	0	0			
S-280	SE	LAKE MURRAY	FW	1.6756	12	0	0	0	NS	140	0
S-290	SE	CAMPING CK	FW	128.5162	12	3	25	2206.6667	D	137	-49.6429
S-850		CAMPING CK									
S-213	SE	LAKE MURRAY	FW	5.4554	12	0	0	0	NS	81	-0.1667
RL-05418	RL05	LAKE MURRAY	FW	2.0963	12	0	0	0			
RL-05410	RL05	LAKE MURRAY	FW	1.4142	12	0	0	0			
RL-03338	RL03	LAKE MURRAY	FW	1.4282	12	0	0	0			
RL-06440	RL06	LAKE MURRAY	FW	1.3277	12	0	0	0			
S-273/ RL-04460	SE	LAKE MURRAY	FW	1.5762	24	0	0	0	D	153	0
RL-03334	RL03	LAKE MURRAY	FW	5.145	12	0	0	0			
S-274	SE	LAKE MURRAY	FW	1.2599	12	0	0	0	D	141	-0.1833
RL-06442	RL06	LAKE MURRAY	FW	2.6321	12	0	0	0			
RL-02316	RL02	LAKE MURRAY	FW	2.18	12	0	0	0			
S-204	SE	LAKE MURRAY	FW	2.5151	12	0	0	0	D	141	0
CL-083	INT	LAKE MURRAY	FW	2.2203	60	0	0	0	I	71	0.2
03050109-14											
S-152	SE	SALUDA RVR	TPGT-SP	3.0254	12	0	0	0	D	80	0
S-287	SE	RAWLS CK	FW	584.7936	12	7	58	2604.2857	NS	83	7.8333
S-149	SE	SALUDA RVR	TPGT-SP	153.589	11	3	27	1516.6667	I	78	4.4444
S-150	SE	LORICK BRANCH	FW	2202.7568	12	10	83	15359	NS	80	-5.7143
S-052		TWELVE MILE CK									
RS-02457	RS02	TWELVEMILE CK	FW	261.3172	12	4	33	830			
S-294	SE	TWELVEMILE CK	FW	467.2381	12	5	42	1628	I	139	7.8
S-848		FOURTEEN MILE CK									
S-260	SE	KINLEY CK	FW	816.9465	12	10	83	1107	NS	82	-34.5
S-298	INT	SALUDA RVR	TPGT-SP	81.4654	72	6	8	1846.6667	D	201	-2.2

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050109-13															
RL-05420	RL05	LAKE MURRAY	FW	12	0	0	0	4	0	0	0	4	0	0	0
S-279/ RL-02318	SE	LAKE MURRAY	FW	20	0	0	0	8	0	0	0	8	0	0	0
S-211	SE	LAKE MURRAY	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-212	SE	LAKE MURRAY	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-977		HOLLOW CK	FW												
S-976		HOLLOW CK	FW												
S-978		LITTLE CK	FW												
S-975		HOLLOW CK	FW												
S-306	INT	HOLLOW CK	FW	41	0	0	0	20	0	0	0	20	0	0	0
S-974		HOLLOW CK	FW												
S-973		LAKE MURRAY	FW												
RL-04372	RL04	LAKE MURRAY	FW	10	0	0	0	4	0	0	0	4	0	0	0
S-280	SE	LAKE MURRAY	FW	12	0	0	0	4	0	0	0	4	0	0	0
S-290	SE	CAMPING CK	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-850		CAMPING CK													
S-213	SE	LAKE MURRAY	FW	8	0	0	0	4	0	0	0	4	0	0	0
RL-05418	RL05	LAKE MURRAY	FW	12	0	0	0	4	0	0	0	4	0	0	0
RL-05410	RL05	LAKE MURRAY	FW	11	0	0	0	4	0	0	0	4	0	0	0
RL-03338	RL03	LAKE MURRAY	FW	6	0	0	0	4	0	0	0	4	0	0	0
RL-06440	RL06	LAKE MURRAY	FW	10	0	0	0	3	0	0	0	3	0	0	0
S-273/ RL-04460	SE	LAKE MURRAY	FW	22	0	0	0	7	0	0	0	7	0	0	0
RL-03334	RL03	LAKE MURRAY	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-274	SE	LAKE MURRAY	FW	12	0	0	0	3	0	0	0	3	0	0	0
RL-06442	RL06	LAKE MURRAY	FW	12	0	0	0	3	0	0	0	3	0	0	0
RL-02316	RL02	LAKE MURRAY	FW	9	0	0	0	4	0	0	0	4	0	0	0
S-204	SE	LAKE MURRAY	FW	12	0	0	0	3	0	0	0	3	0	0	0
CL-083	INT	LAKE MURRAY	FW	48	0	0	0	19	0	0	0	19	0	0	0
03050109-14															
S-152	SE	SALUDA RVR	TPGT-SP	12	0	0	0	4	0	0	0	4	0	0	0
S-287	SE	RAWLS CK	FW	13	0	0	0	5	0	0	0	5	0	0	0
S-149	SE	SALUDA RVR	TPGT-SP	10	0	0	0	4	0	0	0	4	0	0	0
S-150	SE	LORICK BRANCH	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-052		TWELVE MILE CK													
RS-02457	RS02	TWELVEMILE CK	FW	6	0	0	0	4	0	0	0	4	0	0	0
S-294	SE	TWELVEMILE CK	FW	12	0	0	0	4	0	0	0	4	0	0	0
S-848		FOURTEEN MILE CK													
S-260	SE	KINLEY CK	FW	11	0	0	0	4	0	0	0	4	0	0	0
S-298	INT	SALUDA RVR	TPGT-SP	44	0	0	0	20	1	5	14	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050109-13															
RL-05420	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-279/ RL-02318	SE	LAKE MURRAY	FW	8	0	0	0	8	0	0	0	8	0	0	0
S-211	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-212	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-977		HOLLOW CK	FW												
S-976		HOLLOW CK	FW												
S-978		LITTLE CK	FW												
S-975		HOLLOW CK	FW												
S-306	INT	HOLLOW CK	FW	20	1	5	17	20	0	0	0	20	0	0	0
S-974		HOLLOW CK	FW												
S-973		LAKE MURRAY	FW												
RL-04372	RL04	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-280	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-290	SE	CAMPING CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-850		CAMPING CK													
S-213	SE	LAKE MURRAY	FW	4	1	25	13	4	0	0	0	4	0	0	0
RL-05418	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-05410	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-03338	RL03	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
RL-06440	RL06	LAKE MURRAY	FW	3	0	0	0	3	0	0	0	3	0	0	0
S-273/ RL-04460	SE	LAKE MURRAY	FW	7	0	0	0	7	0	0	0	7	0	0	0
RL-03334	RL03	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-274	SE	LAKE MURRAY	FW	3	0	0	0	3	0	0	0	3	0	0	0
RL-06442	RL06	LAKE MURRAY	FW	3	0	0	0	3	0	0	0	3	0	0	0
RL-02316	RL02	LAKE MURRAY	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-204	SE	LAKE MURRAY	FW	3	0	0	0	3	0	0	0	3	0	0	0
CL-083	INT	LAKE MURRAY	FW	19	2	11	14	19	0	0	0	19	0	0	0
03050109-14															
S-152	SE	SALUDA RVR	TPGT-SP	4	0	0	0	4	0	0	0	4	0	0	0
S-287	SE	RAWLS CK	FW	5	1	20	20	5	0	0	0	5	0	0	0
S-149	SE	SALUDA RVR	TPGT-SP	4	0	0	0	4	0	0	0	4	0	0	0
S-150	SE	LORICK BRANCH	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-052		TWELVE MILE CK													
RS-02457	RS02	TWELVEMILE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-294	SE	TWELVEMILE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-848		FOURTEEN MILE CK													
S-260	SE	KINLEY CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
S-298	INT	SALUDA RVR	TPGT-SP	20	1	5	16	20	0	0	0	20	1	5	24

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050109-13											
RL-05420	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-279/ RL-02318	SE	LAKE MURRAY	FW	8	1	13	31	8	0	0	0
S-211	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-212	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-977		HOLLOW CK	FW								
S-976		HOLLOW CK	FW								
S-978		LITTLE CK	FW								
S-975		HOLLOW CK	FW								
S-306	INT	HOLLOW CK	FW	20	0	0	0	20	1	5	180
S-974		HOLLOW CK	FW								
S-973		LAKE MURRAY	FW								
RL-04372	RL04	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-280	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-290	SE	CAMPING CK	FW	4	0	0	0	4	0	0	0
S-850		CAMPING CK									
S-213	SE	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
RL-05418	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
RL-05410	RL05	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
RL-03338	RL03	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
RL-06440	RL06	LAKE MURRAY	FW	3	0	0	0	3	0	0	0
S-273/ RL-04460	SE	LAKE MURRAY	FW	7	0	0	0	7	1	14	85
RL-03334	RL03	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-274	SE	LAKE MURRAY	FW	3	0	0	0	3	0	0	0
RL-06442	RL06	LAKE MURRAY	FW	3	0	0	0	3	0	0	0
RL-02316	RL02	LAKE MURRAY	FW	4	0	0	0	4	0	0	0
S-204	SE	LAKE MURRAY	FW	3	0	0	0	3	0	0	0
CL-083	INT	LAKE MURRAY	FW	19	1	5	34	19	0	0	0
03050109-14											
S-152	SE	SALUDA RVR	TPGT-SP	4	0	0	0	4	0	0	0
S-287	SE	RAWLS CK	FW	5	0	0	0	4	0	0	0
S-149	SE	SALUDA RVR	TPGT-SP	4	0	0	0	4	0	0	0
S-150	SE	LORICK BRANCH	FW	4	0	0	0	4	0	0	0
S-052		TWELVE MILE CK									
RS-02457	RS02	TWELVEMILE CK	FW	4	0	0	0	4	1	25	120
S-294	SE	TWELVEMILE CK	FW	4	0	0	0	4	0	0	0
S-848		FOURTEEN MILE CK									
S-260	SE	KINLEY CK	FW	4	0	0	0	4	0	0	0
S-298	INT	SALUDA RVR	TPGT-SP	20	0	0	0	20	0	0	0

APPENDIX B.

Congaree River Basin

Monitoring Site Descriptions

Ambient Water Quality Monitoring Sites

Station #	Type	Class	Description
03050110-01			
C-565	BIO	FW	CONGAREE CREEK AT SR 34
C-580	BIO	FW	RED BANK CREEK AT ROAD CONNECTING SR 1260 & SR 243
C-066	W	FW	RED BANK CREEK AT S-32-244
C-067	W	FW	RED BANK CREEK AT SANDY SPRINGS ROAD BETWEEN S-32-104 & SC602
C-583	BIO	FW	SECOND CREEK AT SR 647
C-061	W	FW	SAVANA BRANCH AT S-32-72 1.7 MILES NNW OF SOUTH CONGAREE
C-008	W	FW	CONGAREE CREEK AT US 21, AT CAYCE WATER INTAKE
C-025	W	FW	LAKE CAROLINE SPILLWAY AT PLATT SPRINGS ROAD
C-005	W	FW	SIXMILE CREEK ON US 21, S OF CAYCE
C-070	INT	FW	CONGAREE CREEK AT S-32-66
03050110-02			
C-068	W	FW	FOREST LAKE AT DAM
C-001	W	FW	GILLS CREEK AT BRIDGE ON US 76 (GARNERS FERRY ROAD)
C-017	INT	FW	GILLS CREEK AT SC 48 (BLUFF ROAD)
03050110-03			
B-080	W	FW	BROAD RIVER DIVERSION CANAL AT COLUMBIA WATER PLANT
CSB-001L	SSS	FW	CONGAREE RIVER AT BLOSSOM ST (SALUDA RIVER)
CSB-001R	SSS	FW	CONGAREE RIVER AT BLOSSOM ST (BROAD RIVER)
S-955	SSS	FW	CONGAREE RIVER AT ROSEWOOD DRIVE LANDING
S-956	SSS	FW	CONGAREE RIVER AT CAYCE WWTP OUTFALL
S-957	SSS	FW	CONGAREE RIVER AT COLUMBIA METRO WWTP OUTFALL
S-958	SSS	FW	CONGAREE RIVER AT EAST RICHLAND WWTP OUTFALL
S-994	SSS	FW	CONGAREE RIVER UPSTREAM OF CONGAREE CREEK
S-959	SSS	FW	CONGAREE RIVER AT CONGAREE CREEK MOUTH
S-960	SSS	FW	CONGAREE RIVER AT GILLS CREEK MOUTH
S-961	SSS	FW	CONGAREE RIVER AT TOMS BRANCH MOUTH
S-995	SSS	FW	CONGAREE RIVER, MIDWAY BETWEEN VORIDIAN INTAKE AND OUTFALL
S-996	SSS	FW	CONGAREE RIVER, SMALL BEND IN RIVER UPSTR OF WESTINGHOUSE OUTFALL
S-965	SSS	FW	CONGAREE RIVER AT WESTINGHOUSE INDUSTRIES OUTFALL
C-009	INT/BIO	FW	SANDY RUN AT U.S. 176
S-971	SSS	FW	SANDY RUN AT CONFLUENCE WITH CONGAREE RIVER
C-073	W	FW	REEDER POINT BRANCH AT SC 48
C-021	W	FW	MILL CREEK AT SC 262
S-967	SSS	FW	CONGAREE RIVER AT DEVRO-TEEPAK OUTFALL
C-074	INT	FW	CONGAREE RIVER -W BOUNDARY OF CONGAREE NATIONAL PARK
C-010	BIO	FW	BIG BEAVER CREEK AT US 176
C-069	SEDM/BIO	FW	CEDAR CREEK AT S-40-66
C-071	BIO	FW	CEDAR CREEK AT S-40-734
C-075	INT	FW	CEDAR CREEK S OF S-40-734 AT OLD USGS GAGING PLATFORM

Station #	Type	Class	Description
03050110-04			
S-952	SSS	FW	TOMS CREEK AT CR 84
S-951	SSS	FW	TOMS CREEK AT UNPAVED CO. ROAD BETWEEN SR 1318 & SR 1322
C-072	INT	FW	TOMS CREEK AT SC 48
S-950	BIO	FW	TOMS CREEK AT RED BLUFF ROAD BETWEEN SR 1288 & SR 489
RS-04521	RS04/BIO	FW	BUCKHEAD CREEK AT S-09-151, 2.1 MI NE OF FORT MOTTE
C-007	INT	FW	CONGAREE RIVER AT US 601

Groundwater Monitoring Sites

Well #	Class	Aquifer	Location
03050110-01			
AMB-042	GB	MIDDENDORF	HIDDEN VALLEY
03050110-02			
AMB-046	GB	MIDDENDORF	SPRING VALLEY
03050110-03			
AMB-045	GB	MIDDENDORF	FT. JACKSON
AMB-047	GB	MIDDENDORF	HOPKINS

For further details concerning sampling frequency and parameters sampled, please visit our website at www.scdhec.gov/eqc/admin/html/eqcpubs.html#wqreports for the current State of S.C. Monitoring Strategy.

Water Quality Data

Spreadsheet Legend

Station Information:

STATION NUMBER Station ID

TYPE SCDHEC station type code

P = Primary station, sampled monthly all year round

S = Secondary station, sampled monthly May - October

P* = Secondary station upgraded to primary station parameter coverage and sampling frequency for basin study

W = Special watershed station added for the Savannah River Basin study

BIO = Indicates macroinvertebrate community data assessed

INT = Integrator Station (approximates a Primary station)

RL = Random Lake station

RO = Random Open water station

RS = Random Stream station

RT = Random Tide Creek station

WATERBODY NAME Stream or Lake Name

CLASS Stream classification at the point where monitoring station is located

Parameter Abbreviations and Parameter Measurement Units:

DO Dissolved Oxygen (mg/l)

BOD Five-Day Biochemical Oxygen Demand (mg/l)

pH pH (SU)

TP Total Phosphorus (mg/l)

TN Total Nitrogen (mg/l)

TURB Turbidit y (NTU)

TSS Total Suspended Solids (mg/l)

BACT Fecal Coliform Bacteria (#/100 ml)

NH3 Ammonia (mg/l)

CD Cadm ium (ug/l)

CR Chromium (ug/l)

CU Copper (ug/l)

PB Lead (ug/l)

HG Mercur y (ug/l)

NI Nickel (ug/l)

ZN Zinc (ug/l)

Statistical Abbreviations:

N For *standards compliance*, number of surface samples collected between January 2002 and December 2006. For *trends*, number of surface samples collected between January 1992 and December 2006.

EXC. Number of samples contravening the appropriate standard

% Percentage of samples contravening the appropriate standard

MEAN EXC. Mean of samples that contravened the applied standard

MED For *heavy metals with a human health criterion*, this is the median of all surface samples between January 2002 and December 2006. DL indicates that the median was the detection limit.

MAG Magnitude of any statistically significant trend, average change per year, expressed in parameter measurement units

GEO MEAN Geometric mean of fecal coliform bacteria samples collected between January 2002 and December 2006

Key to Trends:

D Statistically significant decreasing trend in parameter concentration

I Statistically significant increasing trend in parameter concentration

***** No statistically significant trend

STATION				DO	DO	DO	MEAN	TRENDS (92-2006)					
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	DO	N	MAG	BOD	N	MAG
03050110-01													
C-565		CONGAREE CK											
C-580		RED BANK CK											
C-066	SE	RED BANK CK	FW	12	0	0	0	NS	82	0.0083	NS	77	0.0143
C-067	SE	RED BANK CK	FW	12	0	0	0	NS	82	0.0024	NS	78	0
C-583		SECOND CK											
C-061	SE	SAVANA BRANCH	FW	12	0	0	0	NS	82	0.02	NS	78	0
C-008	SE	CONGAREE CK	FW	12	0	0	0	I	142	0.0667	I	138	0.0333
C-025	SE	SIXMILE CK	FW	12	0	0	0	NS	83	-0.0261	NS	76	0.03
C-005	SE	SIXMILE CK	FW	12	2	17	4.215	NS	82	-0.0588	NS	79	0.0293
C-070	INT	CONGAREE CK	FW	60	1	2	4.94	D	88	-0.0633	I	88	0
03050110-02													
C-068	SE	LAKE, FOREST	FW	12	0	0	0	NS	136	0.0069	NS	135	0.04
C-001	SE	GILLS CK	FW	12	1	8	4.28	NS	149	-0.05	I	137	0.0667
C-017	INT	GILLS CK	FW	59	7	12	4.3057	D	196	-0.06	NS	186	-0.0167
03050110-03													
B-080	BD	BROAD RVR	FW	12	0	0	0	NS	128	0.0333	NS	123	0.0286
CSB-001R	SEDM	CONGAREE RVR	FW					I	114	0.0817	NS	112	0.05
CSB-001L	SEDM	CONGAREE RVR	FW					NS	114	0.05	NS	111	0
S-955		CONGAREE RVR	FW										
S-956		CONGAREE RVR	FW										
S-957		CONGAREE RVR	FW										
S-958		CONGAREE RVR	FW										
S-994		CONGAREE RVR	FW										
S-959		CONGAREE RVR	FW										
S-960		CONGAREE RVR	FW										
S-961		CONGAREE RVR	FW										
S-995		CONGAREE RVR	FW										
S-996		CONGAREE RVR	FW										
S-965		CONGAREE RVR	FW										
C-009	INT	SANDY RUN	FW	60	0	0	0	NS	88	-0.0225	I	86	0
S-971		SANDY RUN CK	FW										
C-073	SE	REEDER POINT BRANCH	FW	12	0	0	0	NS	62	-0.0429	D	61	-0.1
C-021	SE	MILL CK	FW	12	1	8	4.7	I	81	0.0813	NS	80	0.0375
S-967		CONGAREE RVR	FW										
C-074	INT	CONGAREE RVR	FW	51	0	0	0	D	105	-0.096	I	103	0.0367
C-010		BIG BEAVER CK											
C-069	SEDM	CEDAR CK	FW					NS	57	0.05	NS	55	-0.0143
C-071	I*	CEDAR CK	FW										
C-075	INT	CEDAR CK	FW	59	1	2	4.6	D	117	-0.0675	I	117	0

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050110-01																	
C-565		CONGAREE CK															
C-580		RED BANK CK															
C-066	SE	RED BANK CK	FW	12	0	0	0	NS	82	0.0033	12	0	0	0	D	82	-0.2
C-067	SE	RED BANK CK	FW	12	0	0	0	NS	82	0.0392	12	0	0	0	D	83	-0.16
C-583		SECOND CK															
C-061	SE	SAVANA BRANCH	FW	12	0	0	0	I	82	0.0383	12	0	0	0	NS	83	-0.2111
C-008	SE	CONGAREE CK	FW	12	1	8	5.86	I	141	0.06	12	0	0	0	D	138	-0.37
C-025	SE	SIXMILE CK	FW	12	0	0	0	NS	83	0.026	12	0	0	0	D	80	-0.55
C-005	SE	SIXMILE CK	FW	12	0	0	0	NS	82	0.0018	12	0	0	0	NS	81	-0.0845
C-070	INT	CONGAREE CK	FW	60	3	5	6.36	NS	88	0.005	60	0	0	0	NS	90	0.16
03050110-02																	
C-068	SE	LAKE, FOREST	FW	12	0	0	0	I	137	0.064	12	1	8	37	D	134	-0.75
C-001	SE	GILLS CK	FW	12	0	0	0	I	149	0.05	12	1	8	57	D	138	-1.4625
C-017	INT	GILLS CK	FW	59	2	3	7.37	I	196	0.0267	60	1	2	78	D	186	-1.1667
03050110-03																	
B-080	BD	BROAD RVR	FW	12	0	0	0	I	128	0.05	12	2	17	73.5	D	124	-0.5
CSB-001R	SEDM	CONGAREE RVR	FW					I	115	0.064					D	114	-0.8
CSB-001L	SEDM	CONGAREE RVR	FW					I	115	0.09					NS	114	-0.3333
S-955		CONGAREE RVR	FW														
S-956		CONGAREE RVR	FW														
S-957		CONGAREE RVR	FW														
S-958		CONGAREE RVR	FW														
S-994		CONGAREE RVR	FW														
S-959		CONGAREE RVR	FW														
S-960		CONGAREE RVR	FW														
S-961		CONGAREE RVR	FW														
S-995		CONGAREE RVR	FW														
S-996		CONGAREE RVR	FW														
S-965		CONGAREE RVR	FW														
C-009	INT	SANDY RUN	FW	60	22	37	5.8009	NS	88	0.03	60	0	0	0	NS	89	0
S-971		SANDY RUN CK	FW														
C-073	SE	REEDER POINT BRANCH	FW	12	0	0	0	I	62	0.045	12	0	0	0	NS	61	-0.3143
C-021	SE	MILL CK	FW	12	5	42	5.848	NS	81	0.042	12	0	0	0	NS	80	-0.15
S-967		CONGAREE RVR	FW														
C-074	INT	CONGAREE RVR	FW	51	0	0	0	NS	106	0.015	51	1	2	54	NS	106	-0.08
C-010		BIG BEAVER CK															
C-069	SEDM	CEDAR CK	FW					NS	57	0.0333					D	56	-0.1667
C-071	I*	CEDAR CK	FW														
C-075	INT	CEDAR CK	FW	59	17	29	5.8394	NS	117	0.01	60	0	0	0	NS	118	-0.0333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	TP N	TP EXC.	TP %	MEAN EXC.	TRENDS (92-2006) TP	TRENDS (92-2006) N	TRENDS (92-2006) MAG	TN N	TN EXC.	TN %	MEAN EXC.	TRENDS (92-2006) TN	TRENDS (92-2006) N	TRENDS (92-2006) MAG
03050110-01																	
C-565		CONGAREE CK															
C-580		RED BANK CK															
C-066	SE	RED BANK CK	FW					NS	57	0							
C-067	SE	RED BANK CK	FW					NS	58	0.005							
C-583		SECOND CK															
C-061	SE	SAVANA BRANCH	FW					D	59	-0.0033							
C-008	SE	CONGAREE CK	FW					D	104	0					NS	130	-0.01
C-025	SE	SIXMILE CK	FW					NS	57	-0.0003							
C-005	SE	SIXMILE CK	FW					NS	58	0							
C-070	INT	CONGAREE CK	FW					NS	77	0					I	66	0.0194
03050110-02																	
C-068	SE	LAKE, FOREST	FW	12	0	0	0	NS	101	0	10	0	0	0	NS	128	-0.01
C-001	SE	GILLS CK	FW					D	113	-0.002					D	140	-0.01
C-017	INT	GILLS CK	FW					D	162	-0.0017					NS	177	-0.005
03050110-03																	
B-080	BD	BROAD RVR	FW					NS	100	0					NS	122	0.01
CSB-001R	SEDM	CONGAREE RVR	FW					D	90	-0.0029					NS	113	0
CSB-001L	SEDM	CONGAREE RVR	FW					NS	90	-0.0018					NS	114	-0.005
S-955		CONGAREE RVR	FW														
S-956		CONGAREE RVR	FW														
S-957		CONGAREE RVR	FW														
S-958		CONGAREE RVR	FW														
S-994		CONGAREE RVR	FW														
S-959		CONGAREE RVR	FW														
S-960		CONGAREE RVR	FW														
S-961		CONGAREE RVR	FW														
S-995		CONGAREE RVR	FW														
S-996		CONGAREE RVR	FW														
S-965		CONGAREE RVR	FW														
C-009	INT	SANDY RUN	FW					NS	78	0					NS	69	0.0059
S-971		SANDY RUN CK	FW														
C-073	SE	REEDER POINT BRANCH	FW					NS	38	-0.0038							
C-021	SE	MILL CK	FW					D	56	-0.0002							
S-967		CONGAREE RVR	FW														
C-074	INT	CONGAREE RVR	FW					NS	75	-0.0007					NS	93	0.015
C-010		BIG BEAVER CK															
C-069	SEDM	CEDAR CK	FW					NS	44	0							
C-071	I*	CEDAR CK	FW														
C-075	INT	CEDAR CK	FW					D	82	0					NS	100	0.0103

STATION				CHL	CHL	CHL	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	TSS	N	MAG
03050110-01										
C-565		CONGAREE CK								
C-580		RED BANK CK								
C-066	SE	RED BANK CK	FW							
C-067	SE	RED BANK CK	FW					NS	36	0
C-583		SECOND CK								
C-061	SE	SAVANA BRANCH	FW					NS	36	0
C-008	SE	CONGAREE CK	FW					NS	70	0.25
C-025	SE	SIXMILE CK	FW							
C-005	SE	SIXMILE CK	FW					NS	39	0.5
C-070	INT	CONGAREE CK	FW							
03050110-02										
C-068	SE	LAKE, FOREST	FW	2	1	50	44.32			
C-001	SE	GILLS CK	FW					NS	81	-0.5
C-017	INT	GILLS CK	FW					D	88	-1
03050110-03										
B-080	BD	BROAD RVR	FW							
CSB-001R	SEDM	CONGAREE RVR	FW					NS	92	-0.3936
CSB-001L	SEDM	CONGAREE RVR	FW					NS	92	0
S-955		CONGAREE RVR	FW							
S-956		CONGAREE RVR	FW							
S-957		CONGAREE RVR	FW							
S-958		CONGAREE RVR	FW							
S-994		CONGAREE RVR	FW							
S-959		CONGAREE RVR	FW							
S-960		CONGAREE RVR	FW							
S-961		CONGAREE RVR	FW							
S-995		CONGAREE RVR	FW							
S-996		CONGAREE RVR	FW							
S-965		CONGAREE RVR	FW							
C-009	INT	SANDY RUN	FW							
S-971		SANDY RUN CK	FW							
C-073	SE	REEDER POINT BRANCH	FW							
C-021	SE	MILL CK	FW							
S-967		CONGAREE RVR	FW							
C-074	INT	CONGAREE RVR	FW							
C-010		BIG BEAVER CK								
C-069	SEDM	CEDAR CK	FW							
C-071	I*	CEDAR CK	FW							
C-075	INT	CEDAR CK	FW							

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	N	MAG
03050110-01											
C-565		CONGAREE CK									
C-580		RED BANK CK									
C-066	SE	RED BANK CK	FW	18.4951	12	0	0	0	NS	83	0.5357
C-067	SE	RED BANK CK	FW	124.0883	12	3	25	1040	NS	81	1.1071
C-583		SECOND CK									
C-061	SE	SAVANA BRANCH	FW	186.0144	12	1	8	460	NS	83	6.6667
C-008	SE	CONGAREE CK	FW	182.633	12	4	33	590	NS	142	-0.225
C-025	SE	SIXMILE CK	FW	220.4683	12	4	33	1667.5	NS	80	-4.375
C-005	SE	SIXMILE CK	FW	187.1235	12	2	17	1100	I	83	13.8095
C-070	INT	CONGAREE CK	FW	145.0957	60	10	17	1102	NS	89	0
03050110-02											
C-068	SE	LAKE, FOREST	FW	30.7762	12	0	0	0	NS	135	-1.7
C-001	SE	GILLS CK	FW	378.1841	12	6	50	843.3333	D	143	-16.6667
C-017	INT	GILLS CK	FW	221.6747	60	19	32	1972.1053	D	193	-10
03050110-03											
B-080	BD	BROAD RVR	FW	58.4368	12	2	17	1420	D	125	-4
CSB-001R	SEDM	CONGAREE RVR	FW	59.8575	12	2	17	560	D	128	-6.8333
CSB-001L	SEDM	CONGAREE RVR	FW	90.1797	12	2	17	940	D	129	-4.5
S-955		CONGAREE RVR	FW	67.8804	6	1	17	550			
S-956		CONGAREE RVR	FW								
S-957		CONGAREE RVR	FW								
S-958		CONGAREE RVR	FW								
S-994		CONGAREE RVR	FW	52.7416	6	0	0	0			
S-959		CONGAREE RVR	FW								
S-960		CONGAREE RVR	FW	172.8864	6	1	17	900			
S-961		CONGAREE RVR	FW								
S-995		CONGAREE RVR	FW	63.6985	6	1	17	590			
S-996		CONGAREE RVR	FW	64.2085	6	1	17	1400			
S-965		CONGAREE RVR	FW								
C-009	INT	SANDY RUN	FW	90.7108	60	2	3	525	D	90	-4
S-971		SANDY RUN CK	FW								
C-073	SE	REEDER POINT BRANCH	FW	208.9607	12	3	25	3333.3333	NS	63	-4.4444
C-021	SE	MILL CK	FW	135.299	12	2	17	1005	D	81	-13
S-967		CONGAREE RVR	FW								
C-074	INT	CONGAREE RVR	FW	106.5014	61	15	25	1099.3333	NS	118	1.7917
C-010		BIG BEAVER CK									
C-069	SEDM	CEDAR CK	FW						NS	56	0
C-071	I*	CEDAR CK	FW								
C-075	INT	CEDAR CK	FW	43.926	60	1	2	2000	NS	119	-0.3333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050110-01															
C-565		CONGAREE CK													
C-580		RED BANK CK													
C-066	SE	RED BANK CK	FW	12	0	0	0	4	0	0	0	4	0	0	0
C-067	SE	RED BANK CK	FW	12	0	0	0	4	0	0	0	4	0	0	0
C-583		SECOND CK													
C-061	SE	SAVANA BRANCH	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-008	SE	CONGAREE CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-025	SE	SIXMILE CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-005	SE	SIXMILE CK	FW	9	0	0	0	4	0	0	0	4	0	0	0
C-070	INT	CONGAREE CK	FW	45	0	0	0	20	0	0	0	20	0	0	0
03050110-02															
C-068	SE	LAKE, FOREST	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-001	SE	GILLS CK	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-017	INT	GILLS CK	FW	46	0	0	0	20	0	0	0	20	0	0	0
03050110-03															
B-080	BD	BROAD RVR	FW	10	0	0	0	4	0	0	0	4	1	25	84
CSB-001R	SEDM	CONGAREE RVR	FW												
CSB-001L	SEDM	CONGAREE RVR	FW												
S-955		CONGAREE RVR	FW												
S-956		CONGAREE RVR	FW												
S-957		CONGAREE RVR	FW												
S-958		CONGAREE RVR	FW												
S-994		CONGAREE RVR	FW												
S-959		CONGAREE RVR	FW												
S-960		CONGAREE RVR	FW												
S-961		CONGAREE RVR	FW												
S-995		CONGAREE RVR	FW												
S-996		CONGAREE RVR	FW												
S-965		CONGAREE RVR	FW												
C-009	INT	SANDY RUN	FW	44	0	0	0	19	0	0	0	19	0	0	0
S-971		SANDY RUN CK	FW												
C-073	SE	REEDER POINT BRANCH	FW	10	0	0	0	4	0	0	0	4	0	0	0
C-021	SE	MILL CK	FW	11	0	0	0	3	0	0	0	3	0	0	0
S-967		CONGAREE RVR	FW												
C-074	INT	CONGAREE RVR	FW	39	0	0	0	16	0	0	0	16	0	0	0
C-010		BIG BEAVER CK													
C-069	SEDM	CEDAR CK	FW												
C-071	I*	CEDAR CK	FW												
C-075	INT	CEDAR CK	FW	46	0	0	0	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050110-01															
C-565		CONGAREE CK													
C-580		RED BANK CK													
C-066	SE	RED BANK CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-067	SE	RED BANK CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-583		SECOND CK													
C-061	SE	SAVANA BRANCH	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-008	SE	CONGAREE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-025	SE	SIXMILE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-005	SE	SIXMILE CK	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-070	INT	CONGAREE CK	FW	20	1	5	130	20	0	0	0	20	0	0	0
03050110-02															
C-068	SE	LAKE, FOREST	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-001	SE	GILLS CK	FW	4	1	25	11	4	0	0	0	4	0	0	0
C-017	INT	GILLS CK	FW	20	0	0	0	20	0	0	0	20	0	0	0
03050110-03															
B-080	BD	BROAD RVR	FW	4	0	0	0	4	0	0	0	4	0	0	0
CSB-001R	SEDM	CONGAREE RVR	FW												
CSB-001L	SEDM	CONGAREE RVR	FW												
S-955		CONGAREE RVR	FW	6	0	0	0								
S-956		CONGAREE RVR	FW	6	0	0	0								
S-957		CONGAREE RVR	FW	6	0	0	0								
S-958		CONGAREE RVR	FW	6	1	17	11								
S-994		CONGAREE RVR	FW												
S-959		CONGAREE RVR	FW	6	0	0	0								
S-960		CONGAREE RVR	FW	6	0	0	0								
S-961		CONGAREE RVR	FW	6	0	0	0								
S-995		CONGAREE RVR	FW												
S-996		CONGAREE RVR	FW												
S-965		CONGAREE RVR	FW	5	0	0	0								
C-009	INT	SANDY RUN	FW	19	0	0	0	19	0	0	0	19	0	0	0
S-971		SANDY RUN CK	FW	4	1	25	11								
C-073	SE	REEDER POINT BRANCH	FW	4	0	0	0	4	0	0	0	4	0	0	0
C-021	SE	MILL CK	FW	3	0	0	0	3	0	0	0	3	0	0	0
S-967		CONGAREE RVR	FW	6	2	33	46.5								
C-074	INT	CONGAREE RVR	FW	22	1	5	14	16	0	0	0	16	0	0	0
C-010		BIG BEAVER CK													
C-069	SEDM	CEDAR CK	FW												
C-071	I*	CEDAR CK	FW												
C-075	INT	CEDAR CK	FW	20	0	0	0	20	0	0	0	20	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050110-01											
C-565		CONGAREE CK									
C-580		RED BANK CK									
C-066	SE	RED BANK CK	FW	4	0	0	0	4	0	0	0
C-067	SE	RED BANK CK	FW	4	0	0	0	4	0	0	0
C-583		SECOND CK									
C-061	SE	SAVANA BRANCH	FW	4	0	0	0	4	0	0	0
C-008	SE	CONGAREE CK	FW	4	0	0	0	4	1	25	170
C-025	SE	SIXMILE CK	FW	4	0	0	0	4	0	0	0
C-005	SE	SIXMILE CK	FW	4	0	0	0	4	0	0	0
C-070	INT	CONGAREE CK	FW	20	0	0	0	20	0	0	0
03050110-02											
C-068	SE	LAKE, FOREST	FW	4	0	0	0	4	0	0	0
C-001	SE	GILLS CK	FW	4	0	0	0	4	0	0	0
C-017	INT	GILLS CK	FW	20	0	0	0	20	0	0	0
03050110-03											
B-080	BD	BROAD RVR	FW	4	1	25	85	4	0	0	0
CSB-001R	SEDM	CONGAREE RVR	FW								
CSB-001L	SEDM	CONGAREE RVR	FW								
S-955		CONGAREE RVR	FW								
S-956		CONGAREE RVR	FW								
S-957		CONGAREE RVR	FW								
S-958		CONGAREE RVR	FW								
S-994		CONGAREE RVR	FW								
S-959		CONGAREE RVR	FW								
S-960		CONGAREE RVR	FW								
S-961		CONGAREE RVR	FW								
S-995		CONGAREE RVR	FW								
S-996		CONGAREE RVR	FW								
S-965		CONGAREE RVR	FW								
C-009	INT	SANDY RUN	FW	19	0	0	0	19	0	0	0
S-971		SANDY RUN CK	FW								
C-073	SE	REEDER POINT BRANCH	FW	4	0	0	0	4	0	0	0
C-021	SE	MILL CK	FW	3	0	0	0	3	0	0	0
S-967		CONGAREE RVR	FW								
C-074	INT	CONGAREE RVR	FW	16	0	0	0	16	1	6	170
C-010		BIG BEAVER CK									
C-069	SEDM	CEDAR CK	FW								
C-071	I*	CEDAR CK	FW								
C-075	INT	CEDAR CK	FW	20	0	0	0	20	1	5	230

STATION NUMBER	TYPE	WATERBODY NAME	CLASS		DO N	DO EXC.	DO %	MEAN EXC.	TRENDS (92-2006) DO	N	MAG	BOD	N	MAG
03050110-04														
S-952		TOMS CK	FW											
S-951		TOMS CK	FW											
C-072	INT	TOMS CK	FW		59	1	2	4.2	D	122	-0.0857	I	123	0.0423
S-950		TOMS CK	FW		2	0	0	0						
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW		23	4	17	4.3275						
C-007/ SC-001	INT	CONGAREE RVR	FW		57	0	0	0	NS	183	-0.02	I	172	0.0889

STATION				pH	pH	pH	MEAN	TRENDS (92-2006)			TURB	TURB	TURB	MEAN	TRENDS (92-2006)		
NUMBER	TYPE	WATERBODY NAME	CLASS	N	EXC.	%	EXC.	PH	N	MAG	N	EXC.	%	EXC.	TURB	N	MAG
03050110-04																	
S-952		TOMS CK	FW														
S-951		TOMS CK	FW														
C-072	INT	TOMS CK	FW	59	31	53	5.651	NS	122	0.01	60	0	0	0	NS	123	-0.02
S-950		TOMS CK	FW	2	0	0	0										
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW	23	1	4	5.97				24	1	4	54			
C-007/ SC-001	INT	CONGAREE RVR	FW	57	0	0	0	I	183	0.04	57	4	7	68.75	NS	177	-0.3333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS		TP N	TP EXC.	TP %	MEAN EXC.	TRENDS (92-2006) TP	TRENDS (92-2006) N	TRENDS (92-2006) MAG		TN N	TN EXC.	TN %	MEAN EXC.	TRENDS (92-2006) TN	TRENDS (92-2006) N	TRENDS (92-2006) MAG
03050110-04																			
S-952		TOMS CK	FW																
S-951		TOMS CK	FW																
C-072	INT	TOMS CK	FW						NS	89	0						NS	105	0.0122
S-950		TOMS CK	FW																
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW																
C-007/ SC-001	INT	CONGAREE RVR	FW						D	144	-0.0015						I	160	0.0183

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CHL N	CHL EXC.	CHL %	MEAN EXC.	TRENDS (92-2006) TSS	N	MAG
03050110-04										
S-952		TOMS CK	FW							
S-951		TOMS CK	FW							
C-072	INT	TOMS CK	FW							
S-950		TOMS CK	FW							
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW							
C-007/ SC-001	INT	CONGAREE RVR	FW					NS	89	-0.3333

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	GEO MEAN	BACT N	BACT EXC.	BACT %	MEAN EXC.	TRENDS (92-2006) BACT	TRENDS (92-2006) N	TRENDS (92-2006) MAG
03050110-04											
S-952		TOMS CK	FW	83.3349	12	1	8	490			
S-951		TOMS CK	FW	94.93	12	1	8	480			
C-072	INT	TOMS CK	FW	178.3583	72	12	17	1343.3333	NS	137	-2.5556
S-950		TOMS CK	FW	82.3463	19	2	11	1460			
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW	102.1275	24	1	4	2200			
C-007/ SC-001	INT	CONGAREE RVR	FW	68.4705	57	8	14	921.25	NS	178	-0.3542

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NH3 N	NH3 EXC.	NH3 %	MEAN EXC.	CD N	CD EXC.	CD %	MEAN EXC.	CR N	CR EXC.	CR %	MEAN EXC.
03050110-04															
S-952		TOMS CK	FW												
S-951		TOMS CK	FW												
C-072	INT	TOMS CK	FW	44	0	0	0	20	0	0	0	20	0	0	0
S-950		TOMS CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW	20	0	0	0	7	0	0	0	7	0	0	0
C-007/ SC-001	INT	CONGAREE RVR	FW	43	0	0	0	17	0	0	0	17	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	CU N	CU EXC.	CU %	MEAN EXC.	PB N	PB EXC.	PB %	MEAN EXC.	HG N	HG EXC.	HG %	MEAN EXC.
03050110-04															
S-952		TOMS CK	FW												
S-951		TOMS CK	FW												
C-072	INT	TOMS CK	FW	20	1	5	22	20	0	0	0	20	0	0	0
S-950		TOMS CK	FW	1	0	0	0	1	0	0	0	1	0	0	0
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW	7	0	0	0	7	0	0	0	7	0	0	0
C-007/ SC-001	INT	CONGAREE RVR	FW	17	2	12	15.5	17	0	0	0	17	0	0	0

STATION NUMBER	TYPE	WATERBODY NAME	CLASS	NI N	NI EXC.	NI %	MEAN EXC.	ZN N	ZN EXC.	ZN %	MEAN EXC.
03050110-04											
S-952		TOMS CK	FW								
S-951		TOMS CK	FW								
C-072	INT	TOMS CK	FW	20	0	0	0	20	0	0	0
S-950		TOMS CK	FW	1	0	0	0				
RS-04521/ RS-06023	RS04	BUCKHEAD CK	FW	7	0	0	0	7	0	0	0
C-007/ SC-001	INT	CONGAREE RVR	FW	17	0	0	0	17	0	0	0

APPENDIX C.

Waterbody Index

Waterbody Index

APPENDIX D.

Monitoring Station/Well Index

Monitoring Station/Well Index

Surface Water Quality Monitoring Stations

Ambient Groundwater Quality Monitoring Wells

APPENDIX E.

Facility Index

Facility Index

APPENDIX F.

Facility Permit Number Index

Facility Permit Number Index

General Permits

Land Application

Mining

Landfills (continued)

South Carolina Department of Health
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