

03060101-05

(Coneross Creek/Lake Hartwell)

General Description

Watershed 03060101-05 (formerly 03060101-080 plus a portion of -040) is located in Oconee County and consists primarily of *Coneross Creek* and its tributaries, which form an arm of *Lake Hartwell*. The watershed occupies 68,125 acres of the Blue Ridge and Piedmont regions of South Carolina. Land use/land cover in the watershed includes: 49.1% forested land, 34.4% agricultural land, 12.2% urban land, 3.3% water, 0.8% barren land, and 0.2% forested wetland (swamp). A map depicting this watershed is found in Appendix A, page A-36.

Coneross Creek accepts drainage from Yellow Branch and Otter Creek (Lake Jemike) before flowing into Coneross Creek Reservoir. It then accepts drainage from White Fork, Negro Fork (Negro Fork Reservoir), Bear Swamp Creek, Colonels Fork Creek, Richland Creek (Halfway Branch, Webb Pond), Perkins Creek, Snow Creek, and Speeds Creek before forming an arm of Lake Hartwell. There are a total of 236.4 stream miles and 2,304.2 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
RS-02304	RS02	FW	COLONELS FORK CREEK AT S-37-91
SV-333	W	FW	CONEROSS CREEK AT S-37-13
SV-004	INT	FW	CONEROSS CREEK AT SC 59
RS-05412	RS05/BIO	FW	SNOW CREEK AT S-37-51, 4.9 MI SW OF SENECA
SV-236	W	FW	CONEROSS CK ARM OF L. HARTWELL AT S-37-184, 6.5 MI SSE OF SENECA

Colonels Fork Creek (RS-02304) - Aquatic life uses are fully supported, but recreational uses are partially supported due to fecal coliform bacteria excursions.

Coneross Creek - There are two SCDHEC monitoring stations along Coneross Creek. Aquatic life uses are fully supported at the upstream site (*SV-333*); however, there is a significant increasing trend in five-day biochemical oxygen demand. Significant increasing trends in dissolved oxygen concentration and decreasing trends in turbidity and fecal coliform bacteria concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions. At the downstream site (*SV-004*), aquatic life uses are partially supported due to occurrences of zinc in excess of the aquatic life acute criterion. There is also 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.

Snow Creek (RS-05412) – Although pH excursions occurred, aquatic life uses are fully supported based on macroinvertebrate community data. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Coneross Creek Arm of Lake Hartwell (SV-236) - Aquatic life and recreational uses are fully supported at this lake site; however, there are significant decreasing trends in dissolved oxygen concentration and increasing trends in five-day biochemical oxygen demand and total nitrogen concentration. There is a significant increasing trend in pH.

A fish consumption advisory has been issued by the Department for PCBs (Polychlorinated biphenols) and includes the impounded area (Lake Hartwell) of Coneross Creek within this watershed (see advisory p.38).

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-070	GB	SAPROLITE	MOUNTAIN REST DEEP
AMB-081	GB	PIEDMONT BEDROCK	MOUNTAIN REST SHALLOW

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME</i>	<i>NPDES# TYPE</i>
CONEROSS CREEK OCONEE COUNTY/CONEROSS CREEK WWTP	SC0033553 MAJOR DOMESTIC
CONEROSS CREEK WALHALLA/CONEROSS CREEK WTP	SCG641004 MINOR DOMESTIC
BEAR SWAMP CREEK TRIBUTARY AVONDALE MILLS INC./WALHALLA PLT	SCG250114 MINOR INDUSTRIAL
CONEROSS CREEK OCONEE COUNTY ROCK QUARRY	SCG730448 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
FIVE POINTS MUNICIPAL SW LANDFILL DOMESTIC	371001-1102 INACTIVE
LAKE VIEW LANDFILL DOMESTIC	----- INACTIVE
SENECA MUNICIPAL SW LANDFILL DOMESTIC	371001-1101 INACTIVE

OCONEE NUCLEAR STATION LANDFILL INDUSTRIAL	373303-1601 ACTIVE
HURDT LAND-CLEARING LANDFILL C &D	372494-1701 INACTIVE
JP STEVENS & CO.-WEST POINT PEPPERAL INDUSTRIAL	----- INACTIVE
SENECA (OCONEE) C&D LANDFILL C&D	371001-1201 ACTIVE
SENECA 2 (OCONEE) C&D LANDFILL C&D	371001-1202 ACTIVE
SENECA MULCHING FACILITY COMPOSTING	371001-3001 ACTIVE
OCONEE COUNTY TRANSFER STATION TRANSFER STATION	371001-6001 ACTIVE

Mining Activities

<i>MINING COMPANY</i> <i>MINE NAME</i>	<i>PERMIT #</i> <i>MINERAL</i>
OCONEE COUNTY OCONEE COUNTY ROCK QUARRY	0253-73 GRANITE

Water Quantity

<i>WATER USER</i> <i>STREAM</i>	<i>TOTAL PUMP. CAP (MGD)</i> <i>RATED PUMP CAP (MGD)</i>
CITY OF WALHALLA CONEROSS CREEK	4.3 3.0
CITY OF WALHALLA NEGRO FORK	0.0 0.0

Growth Potential

There is a moderate to high potential for growth in this watershed, which contains portions of the Cities of Walhalla and Seneca and the Town of Westminster. Residential, commercial, and industrial growth is expected along the US 123 corridor from Westminster through Seneca to Clemson, as well as along SC 28 from Seneca through West Union to Walhalla. Seneca, in particular, is considered one of the largest manufacturing areas in the upstate region. Growth of the manufacturing industry is dependent on infrastructural expansion, which is dependent on the capacity of existing facilities. The regional wastewater treatment facility has expanded and is able to support future growth.

Watershed Protection and Restoration Strategies

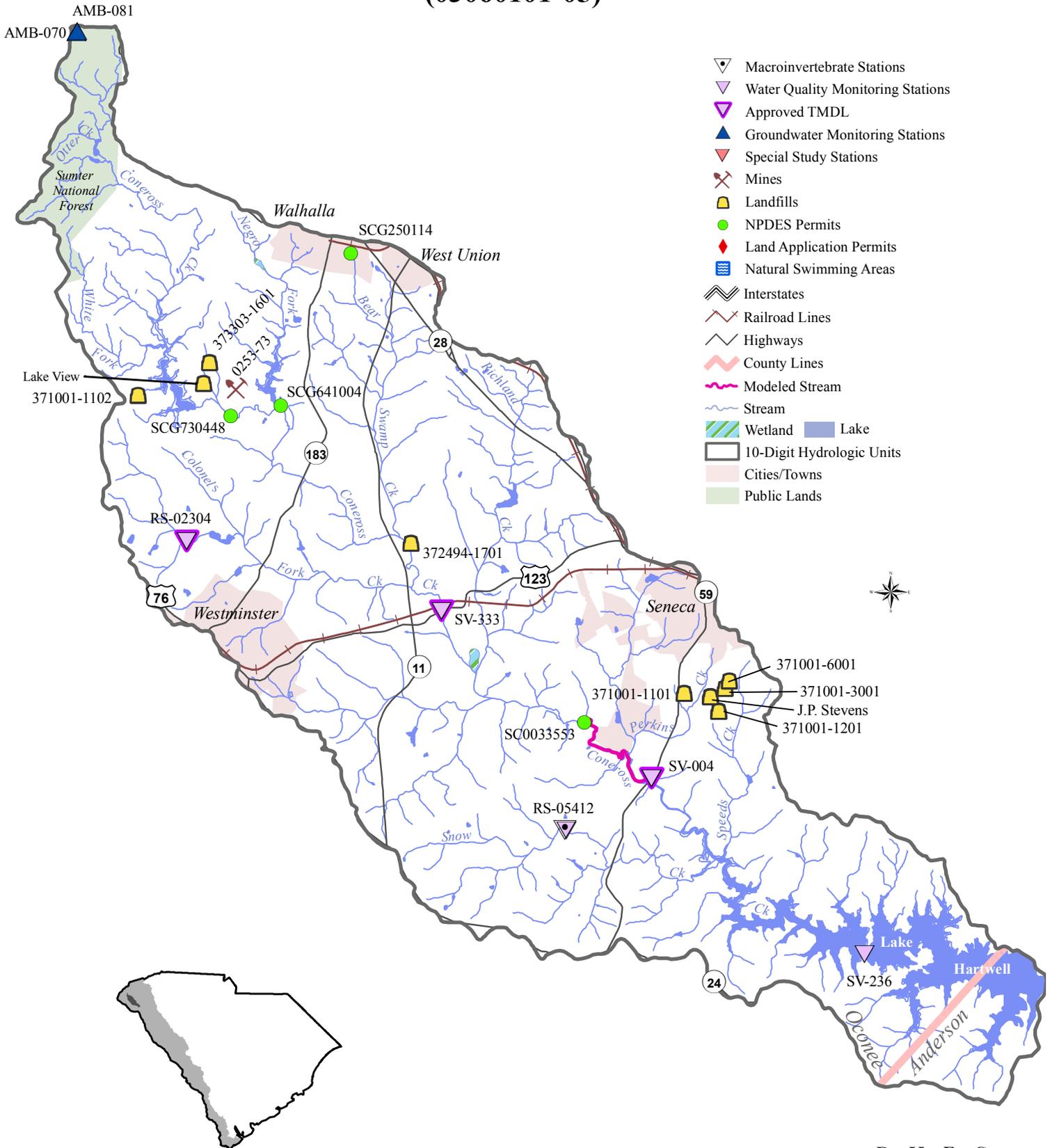
Total Maximum Daily Loads (TMDLs)

A TMDL was developed to determine the maximum amount of fecal coliform bacteria **Coneross Creek** at water quality monitoring sites SV-333 and SV-004 can receive from point and nonpoint sources and still meet water quality standards. EPA's BASINS model (HSPF) was used to calculate the continuous in-stream concentration of fecal coliform bacteria. Based on this estimation, we calculated the sum of the allowable loads of the single pollutant from all contributing point and nonpoint sources. This TMDL includes a margin of safety and seasonality to ensure that the waterbody can be used for the recreational use purposes that the State has designated. This TMDL recommends a reduction of 50% in the loading from unidentified sources, which includes sanitary sewer overflows, leaking sanitary sewers, failing septic systems, and direct discharges.

The nonpoint source component of the Coneross Creek TMDL has been implemented using §319 grant funds. Implementation was completed in December 2005. For more information on §319 grants, visit <http://www.scdhec.gov/water> and click on Nonpoint Source Program.

Coneross Creek/Lake Hartwell Watershed

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- ▽ 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

