

03060102-05

(Tugaloo River/Lake Hartwell)

General Description

The South Carolina portion of watershed 03060102-05 (formerly 03060102-130) is located in Oconee and Anderson Counties and consists primarily of the lower **Tugaloo River** and its tributaries from the Chauga River through **Lake Hartwell**. This portion of the Tugaloo River watershed extends into Georgia. There are 179,670 acres in the extended watershed; 94,679 acres or 52.7% are outside of South Carolina. The South Carolina portion is within the Piedmont physiographic region. Land use/land cover in the South Carolina portion includes: 41.8% forested land, 38.9% agricultural land, 7.0% urban land, 10.4% water, 0.9% forested wetland (swamp), and 1.0% barren land. A map depicting this watershed is found in Appendix A, page A-32.

This portion of the Tugaloo River flows through Lake Hartwell and between the states of South Carolina and Georgia. Streams flowing into the river from the Georgia side are connoted with an asterisk. The Tugaloo River accepts drainage from Rock Creek*, Eastanolla Creek*, Sugar Creek, Choestoea Creek (Johns Pond, Freeman Pond, Norris Creek, Harbin Creek, Little Choestoea Creek), Crawford Creek*, Crawford Creek*, Whitworth Creek*, Shoal Creek*, Fairplay Creek, Paynes Creek*, Reed Creek*, Beaverdam Creek (Mud Creek, Cleveland Creek), Cranes Creek*, and Little Beaverdam Creek before merging with the Seneca River Watershed to form the Savannah River. There are a total of 544.1 stream miles and 17,041.2 acres of lake waters within the extended watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-301	W	FW	NORRIS CREEK AT S-37-435, 1 MI S OF WESTMINSTER
SV-108	W/BIO	FW	CHOESTOE A CREEK AT S-37-49
RL-03352	RL03	FW	LAKE HARTWELL, 0.9MI NE ANDERSON/OCONEE/HART CO. GA
SV-363	INT	FW	LK HARTWELL, OFF GLENN FORD LANDING US BEAVERDAM CK COVE
RL-03459	RL03	FW	LK HARTWELL, TUGALOO R. ARM APPROX. 1.2 MI S OF S-04-890 & S-04-23
SV-345	W/BIO	FW	BEAVERDAM CREEK AT S-37-66
RS-06170	RS06	FW	MUD CREEK AT BRIDGE ON S-37-99, 2.9 MI NE OF FAIR PLAY
SV-364	W	FW	BEAVERDAM CREEK AT SC 243
RL-03333	RL03	FW	LAKE HARTWELL, 3.9 MI NW OF SADLERS CREEK ST. PARK

Norris Creek (SV-301) - 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.

Choestoea Creek (SV-108) - Aquatic life uses are fully supported based on macroinvertebrate community data; however, there are significant increasing trends in five-day biochemical oxygen

demand and total nitrogen concentration. Recreational uses are not supported due to fecal coliform bacteria excursions.

Lake Hartwell - There are four SCDHEC monitoring stations along Lake Hartwell (**RL-03352, SV-363, RL-03459, RL-03333**) and aquatic life and recreational uses are fully supported at all sites. Significant increasing trends in dissolved oxygen and decreasing trends in turbidity at **SV-363** suggest improving conditions for these parameters at this site.

Beaverdam Creek – There are two SCDHEC monitoring stations along Beaverdam Creek, and recreational uses are partially supported at both sites due to fecal coliform bacteria excursions. At the upstream site (**SV-345**), aquatic life uses are partially supported based on macroinvertebrate community data and pH excursions. At the downstream site (**SV-364**), aquatic life uses are partially supported due to pH excursions.

Mud Creek (RS-06170) - Aquatic life uses are fully supported. Recreational uses are partially supported due to fecal coliform bacteria excursions.

A fish consumption advisory has been issued by the Department for PCBs (Polychlorinated biphenols) and includes Lake Hartwell within this watershed. A fish consumption advisory has also been issued by the State of Georgia for mercury and PCBs for the Tugaloo River arm of Lake Hartwell within this watershed (see p. 38).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME	NPDES# TYPE
HARBIN CREEK WEST OAK HS/OCONEE CO. SCH. DIST.	SC0038644 MINOR DOMESTIC
LAKE HARTWELL TOTAL ENVIRON/FOXWOOD HILLS SD	SC0022357 MINOR DOMESTIC
LAKE HARTWELL SCDOT WELCOME CENTER/FAIRPLAY	SC0026638 MINOR DOMESTIC
LAKE HARTWELL NACO/CAROLINA LANDING CAMPGROUND	SC0022063 MINOR DOMESTIC
LAKE HARTWELL TRIBUTARY CHICKASAW POINT SD	SC0048259 MINOR DOMESTIC
CLEVELAND CREEK S&S CONSTRUCTION/OCONEE IND.	SCG731008 MINOR INDUSTRIAL
LAKE HARTWELL TRIBUTARY SLOAN CONSTRUCTION CO./I-85 BORROW PIT	SCG731017 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME <i>FACILITY TYPE</i>	PERMIT # <i>STATUS</i>
STONE BRIDGE CORP. C&D	372900-1301 INACTIVE
WOODY'S CHIP & MULCH COMPOSTING	372703-3001 INACTIVE
ANDERSON-OCONEE TRANSFER STATION TS-MUNICIPAL	042760-6001 ACTIVE

Land Application Sites

LAND APPLICATION SYSTEM <i>FACILITY NAME</i>	ND # <i>TYPE</i>
SPRAYFIELD CHICKASAW UTIL./CHICKASAW POINT	ND0065927 DOMESTIC
SPRAYFIELD LAKESIDE INN	ND0067237 DOMESTIC

Growth Potential

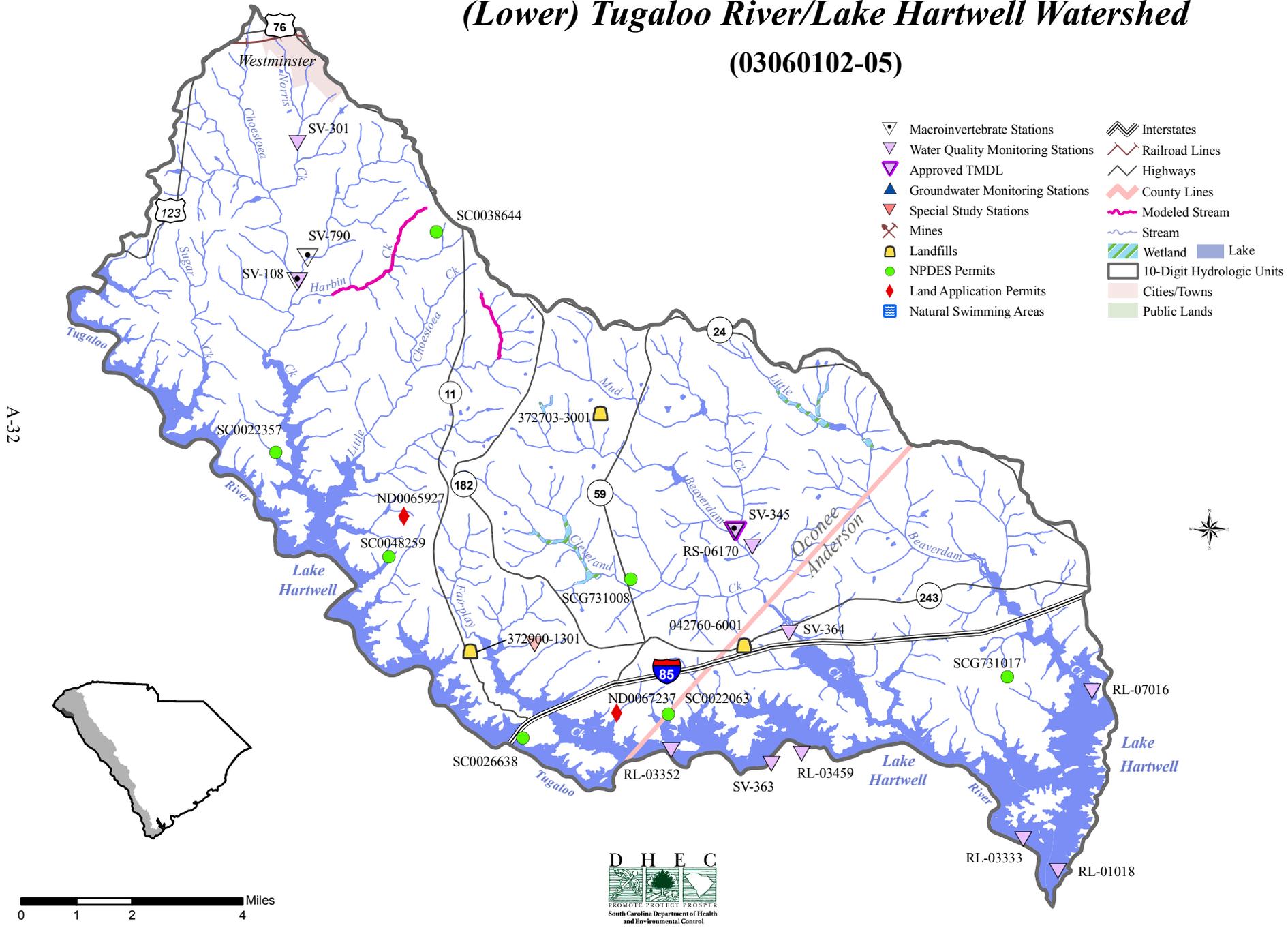
There is a moderate potential for growth in this watershed, which contains portions of the Town of Westminster and Lake Hartwell. Particular emphasis will be placed on residential, commercial, and industrial growth and development along the US 123 corridor, beginning with Westminster and extending towards the City of Seneca. I-85 crosses the lower portion of the watershed, and development pressures continue along the lakeshore.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

A TMDL was developed for SCDHEC and approved by EPA for **Beaverdam Creek** at water quality monitoring site SV-345. The TMDL determines the maximum amount of fecal coliform bacteria this stream can receive and still meet water quality standards. Agriculture and Silviculture are the two major land uses in the watershed and both can be sources of fecal coliform. Targeting agricultural land for reduction of bacteria is the most effective strategy for this watershed. The TMDL translates to a 55% reduction in the loading from agricultural sources. Forested lands are not targeted for reduction, as there are currently no acceptable means of reducing fecal coliform sources within that land use. The nonpoint source component of the Beaverdam 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.

(Lower) Tugaloo River/Lake Hartwell Watershed (03060102-05)



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