03050207-10 (Ashepoo River/St. Helena Sound)

General Description

Watershed 03050207-10 (formerly 03050208-040) is located in Colleton County and consists primarily of the *Ashepoo River* and its tributaries from Bluehouse Swamp to its discharge into the *St. Helena Sound*. The watershed occupies 81,191 acres of the Coastal Zone region of South Carolina. Land use/land cover in the watershed includes: 31.4% forested land, 26.1% nonforested wetland, 25.8% forested wetland, 9.0% water, 5.0% agricultural land, 2.5% urban land, and 0.2% barren land. A map depicting this watershed is found in Appendix B, page B-23.

This lower watershed of the Ashepoo River accepts drainage from Johno Creek, the Horseshoe Creek Watershed, Deer Creek (Tupelo Swamp), Snuggedy Swamp, Hole in the Wall, Rock Creek, Crooked Creek, Mosquito Creek (Musselboro Creek, Bull Cut), Jefford Creek, Long Ashepoo Creek, and Otter Creek before flowing into St. Helena Sound. The Ashepoo-Coosaw Cut (AIWW) connects the Ashepoo River to Rock Creek and over to the Coosaw River. Fenwick Cut, Jefford Creek and Otter Creek connect the Ashepoo River to the Edisto River Watershed. Rock Creek drains into the both the Ashepoo River and St. Helena Sound. Also draining directly into the sound are Two Sisters Creek and Bank Creek. There are a total of 238.0 stream miles, 240.3 acres of lake waters, and 5,439.5 estuarine acres in this watershed. The Ashepoo River and its tributaries are classified FW above the saltwater intrusion (approximately US 17) and SFH below the intrusion.

Surface Water Quality

Station #	<u>Type</u>	<u>Class</u>	Description
CSTL-068 INT		FW/SFH	ASHEPOO RIVER AT SC 303, 10MI SSW OF WALTERBORO
CSTL-069	W	SFH	ASHEPOO RIVER AT US 17, 3.4MI ESE OF GREEN POND
MD-251	W	SFH	ASHEPOO RIVER AT S-15-26
RO-046071	RO04	SFH	ASHEPOO RIVER AT HOLE-IN-THE-WALL OXBOW, 0.5MI SW OF S-15-26
RT-032035	RT03	SFH	ROCK CREEK, 0.75 MI SW OF CONFLUENCE WITH ASHEPOO RIVER
MD-253	INT	SFH	Ashepoo River at public oyster ground $(14-19)$

Ashepoo River – There are five SCDHEC monitoring stations along the Ashepoo River. At the furthest upstream site (*CSTL-068*), aquatic life uses are not supported due to occurrences of zinc in excess of the aquatic life chronic criterion. In addition, there are significant increasing trends in five-day biochemical oxygen demand and total phosphorus concentration. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in such transitional areas and are considered natural, not standards violations. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions; which is compounded by a significant decreasing trend in dissolved oxygen. Although pH excursions occurred, they were considered natural, not standards violations. Recreational uses are partially supported natural, not standards violations. Recreational uses are considered natural, not standards violations. Recreational uses are partially supported at the uses are not supported oxygen. Although pH excursions occurred, they were considered natural, not standards violations. Recreational uses are partially supported due to fecal coliform bacteria uses are partially supported due to fecal coliform bacteria excursions. At the next two downstream sites (*MD-251, RO-046071*), aquatic life uses are not supported due to turbidity excursions. Recreational uses are fully supported at these sites. At the furthest downstream site (*MD-253*), aquatic life uses are not

supported due to turbidity excursions. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Although dissolved oxygen excursions occurred, they were typical of values seen in such transitional areas and are considered natural, not standards violations. Recreational uses are fully supported.

Rock Creek (RT-032035) - Aquatic life uses are not supported due to turbidity excursions. Although dissolved oxygen excursions occurred, they were typical of values seen in such transitional areas and are considered natural, not standards violations. Recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the Ashepoo River within this watershed (see advisory p.54).

Shellfish Monitoring Stations

Station #	Description
14-08	ASHEPOO RIVER AT ST. HELENA SOUND – BLACK CAN BUOY
14-19	ASHEPOO RIVER POG
14-20	CUT BETWEEN SOUTH EDISTO RIVER AND THE ASHEPOO RIVER
14-21	CONFLUENCE OF MOSQUITO CREEK AND THE ASHEPOO RIVER

Groundwater Quality

Well #	Class	Aquifer	Location
AMB-086	GB	SURFICIAL SANDS	BENNETTS POINT

All water samples collected from ambient monitoring well *AMB-086* met standards for Class GB groundwater.

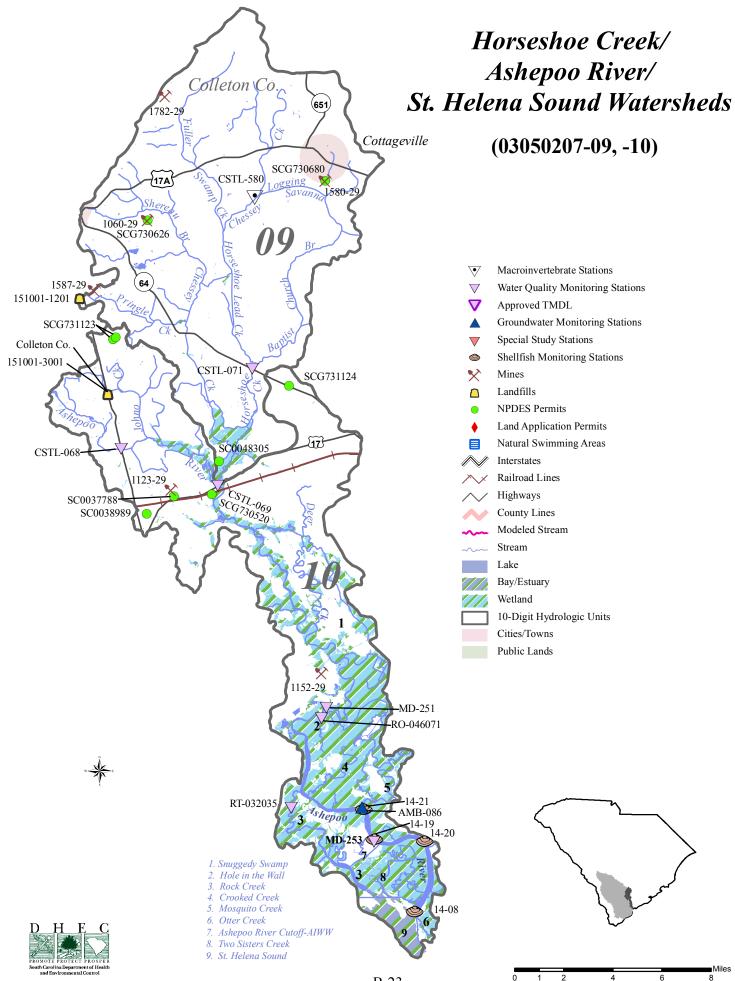
NPDES Program

Active NPDES Facilities					
RECEIVING STREAM	NPDES#				
FACILITY NAME	TYPE				
ASHEPOO RIVER TRIBUTARY	SC0038989				
IVENIA BROWN ELEMENTARY	MINOR DOMESTIC				
ASHEPOO RIVER	SC0037788				
BOLEN POINT SD/CARGILSELL & CO.	MINOR DOMESTIC				
ASHEPOO RIVER TRIBUTARY	SCG730520				
ASHEPOO CONSTRUCTION/GREEN POND #1 MINE	MINOR INDUSTRIAL				
TUPELO SWAMP	SCG731124				
LANE CONSTRUCTION/ROWE BORROW SITE	MINOR INDUSTRIAL				
JOHNO CREEK	SCG731123				
LANE CONSTRUCTION/MWV COOKS HILL MINE MINOR	DOMESTIC				

Nonp	oint Source Management Program				
Land I	Disposal Activities				
Landfill Facilities					
	LANDFILL NAME FACILITY TYPE	<i>PERMIT # STATUS</i>			
C/C	COLLETON COUNTY LANDFILL INACTIVE				
	COLLETON COUNTY WOOD CHIPPING FACILITY COMPOSTING	151001-3001 INACTIVE			
Minin	g Activities				
·	MINING COMPANY MINE NAME	PERMIT # MINERAL			
	ASHEPOO CONSTRUCTION 1123-29 GREEN POND #1 MINE SAND;	SAND/CLAY			
	HB LIMEHOUSE 1152-29 AIRY HALL PEAT MINE PEAT				

Growth Potential

There is a low potential for growth in this watershed.



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