

03050207-11

(Coosaw River/ St. Helena Sound)

General Description

Watershed 03050207-11 (formerly a portion of 03050208-100) is located in Beaufort and Colleton Counties and consists primarily of the *Coosaw River* and *St. Helena Sound* and their tributaries, which include the *Bull River* and the *Morgan River*. The watershed occupies 109,292 acres of the Coastal Zone region of South Carolina. Land use/land cover in the watershed includes: 34.1% nonforested wetland, 28.0% water, 21.4% forested land, 8.7% forested wetland, 4.2% agricultural land, 3.2% urban land, and 0.4% barren land. A map depicting this watershed is found in Appendix B, page B-24.

Whale Branch (Campbell Creek, Halfmoon Creek) and Brickyard Creek (McCalleys Creek) join together to form the Coosaw River. Downstream from the confluence, the Coosaw River accepts drainage from Broomfield Creek, Lucy Point Creek (Rock Spring Creek), Parrot Creek (Bass Creek, Duck Pond Creek), the Bull River, the Combahee River Watershed, and Morgan Back Creeks before flowing into St. Helena Sound. The Bull River is formed by the confluence of Wimbee Creek (Branford Creek, True Blue Creek, Briars Creek, Barnwell Creek, South Wimbee Creek) and Williman Creek. Schooner Channel connects Wimbee Creek and Williman Creek. Brickyard Creek and Broomfield Creek connect the Coosaw River to the Beaufort River Watershed. The Morgan River accepts drainage from Lucy Point Creek, Warsaw Flats, Jenkins Creek (Doe Point Creek), Parrot Creek, Eddings Point Creek, Village Creek (Pine Island Creek), and Coffin Creek. Lucy Point Creek and Parrot Creek connect the Coosaw River to the Morgan River. All of these streams, including St. Helena Sound are classified SFH. Bass Creek is classified ORW. There are a total of 28,216.8 estuarine acres in this watershed.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
RT-06010	RT06	SFH	MCCALLEYS CREEK, 1.1 MI SE OF US 21 BRIDGE OVER WHALE BRANCH
RT-042069	RT04	SFH	MCCALLEYS CREEK, 6.8 MI NNW OF BEAUFORT
RO-06314	RO06	SFH	COOSAW RIVER, 5.1 MI NNE OF BEAUFORT
RO-02007	RO02	SFH	COOSAW RIVER, 2.0 MI E OF AIWW
RO-056101	RO05	SFH	COOSAW RIVER, 3.5 MI W OF CONFLUENCE WITH BULLRIVER
RO-046073	RO04	SFH	COOSAW RIVER, 1.3 MI N OF MOUTH OF LUCY POINT CREEK
RT-032041	RT03	SFH	COOSAW RIVER TRIB, 0.2 MI N OF CONFL W/COOSAW R. AT E TIP OF CHISHOLM IS.
RO-056095	RO05	SFH	COOSAW RIVER, 12 MI WSW OF MOUTH OF BULL RIVER
RT-032031	RT03	SFH	WIMBEE CREEK TRIBUTARY NEAR WIMBEE CREEK HEADWATERS
RT-052093	RT05	SFH	SOUTH WIMBEE CREEK, 8.0 MI NNE OF BEAUFORT
RO-036037	RO03	SFH	WIMBEE CREEK, 0.7 MI SE OF MOUTH OF S. WIMBEE CREEK
RT-06003	RT06	SFH	WILLIMAN CREEK TRIBUTARY, 1.0 MI NE OF CONFL WITH WILLIAM CREEK
RT-02015	RT02	SFH	TIDAL CREEK NEAR CONFL OF COOSAW AND BULL RIVERS
RO-02005 RO02		SFH C	COOSAW RIVER NEAR MOUTH OF BULLRIVER
RO-06303	RO06	SFH	COOSAW RIVER, 4.9 MI ENE OF SC 802 BRIDGE OVER LUCY POINT CREEK
MD-168	W	SFH	COOSAW RIVER AT CONFLUENCE OF COMBAHEE RIVER, NEAR BUOY 186
RO-02001	RO02	SFH	COOSAW RIVER, NEAR MOUTH OF COMBAHEE RIVER
RO-046069	RO04	SFH	MOUTH OF COOSAW RIVER AT ST. HELENA SOUND
RO-046067	RO04	SFH	MIDDLE OF ST. HELENA SOUND
RT-042067	RT04	SFH	JENKINSCREEK TRIBUTARY, 4.2 MI SE OF BEAUFORT

MD-255	INT	SFH	JENKINS CREEK AT UNNAMED TRIB N SIDE OF WARSAW ISLAND (16-25)
RT-02027	RT02	SFH	SPARROW NEST CREEK TRIBUTARY NEAR DATHA ISLAND
RT-052113	RT05	SFH	BASS CREEK TRIB OFF PARROT CK BETW COOSAW AND MORGAN RIVERS
RT-032045	RT03	SFH	EDDINGS POINT CK, 1.3MI SW CONFL MORGAN RIVER & 3.3 MI NE FROGMORE
RO-056099	RO05	SFH	VILLAGE CREEK, 4.5 MI NE TOWN OF ST. HELENA ISLAND
RT-032033	RT03	SFH	COFFIN CREEK, 0.7 MI SE OF CONFL WITH MORGAN RIVER

McCalleys Creek – There are two SCDHEC monitoring stations along McCalleys Creek (**RT-06010**, **RT-042069**) and aquatic life and recreational uses are fully supported at both sites. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted at RT-06010, they were typical of values seen in such systems and are considered natural, not standards violations.

Coosaw River – There are ten SCDHEC monitoring stations along the Coosaw River. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted at all site except **RO-046073**, **MD-168**, and **RO-046069**, they were typical of values seen in such systems and are considered natural, not standards violations. At the furthest upstream sites (**RO-06314**, **RO-02007**, **RO-056101**, **RO-046073**, **RO-056095**), aquatic life and recreational uses are fully supported. At the next station downstream (**RO-02005**), aquatic life uses are not supported due to turbidity excursions and occurrences of copper in excess of the aquatic life chronic criterion. Aquatic life and recreational uses are fully supported at the next two sites downstream (**RO-06303**, **MD-168**). Further downstream (**RO-02001**), aquatic life uses are not supported due to turbidity excursions; recreational uses are fully supported. At the furthest downstream site (**RO-046069**), aquatic life and recreational uses are fully supported.

Coosaw River Tributary (RT-032041) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Wimbee Creek Tributary (RT-032031) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

South Wimbee Creek (RT-052093) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Wimbee Creek (RO-036037) – Aquatic life uses are not supported due to turbidity excursions. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen

concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. Recreational uses are fully supported.

Williman Creek Tributary (RT-06003) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Tidal Creek (RT-02015) – Aquatic life uses are not supported due to turbidity excursions and occurrences of copper in excess of the aquatic life chronic criterion. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. Recreational uses are fully supported.

St. Helena Sound (RO-046067) – Aquatic life and recreational uses are fully supported.

Jenkins Creek Tributary (RT-042067) – Aquatic life and recreational uses are fully supported.

Jenkins Creek (MD-255) – Aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Sparrow Nest Creek Tributary (RT-02027) – Aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life chronic criterion. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. Recreational uses are fully supported.

Bass Creek Tributary (RT-052113) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Eddings Point Creek (RT-032045) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Village Creek (RO-056099) – Aquatic life and recreational uses are fully supported. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations.

Coffin Creek (RT-032033) – Aquatic life uses are not supported due to turbidity excursions. This is a tidally influenced system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Although dissolved oxygen excursions were noted, they were typical of values seen in such systems and are considered natural, not standards violations. Recreational uses are fully supported.

Shellfish Monitoring Stations

<u>Station #</u>	<u>Description</u>
14-02	CAMPBELL CREEK AT WHALE BRANCH
14-04	BULL RIVER INLET AND COOSAW RIVER
14-09	ST. HELENA SOUND AT MORGAN BACK CREEK
14-10	PARROT CREEK AND COOSAW RIVER, MARKER #1
14-11	SAM'S POINT AND COOSAW RIVER
14-12A	CONFLUENCE OF COOSAW RIVER AND WHALE BRANCH
14-13	HALFMOON CREEK AT WHALE BRANCH
14-16A	2000 FT SOUTHEAST OF MOUTH OF FISH CREEK
15-01	BRICKYARD CREEK AT RANGE MARKER
15-01A	MCCALLEYS CREEK AT PAWKIE ISLAND
15-33	MCCALLEYS CREEK, 0.5 MI UPSTREAM OF STATION 15-01A
16A-08	MORGAN RIVER AT VILLAGE CREEK
16A-09	EDDING CREEK AT MORGAN RIVER
16A-10	PARROT CREEK AT MORGAN RIVER
16A-11	JENKINS CREEK AT MORGAN RIVER
16A-13	LUCY POINT CREEK AT MORGAN RIVER
16A-13A	S. EDGE OF LUCY POINT CREEK CSZ AT POLLUTION LINE
16A-13B	N. EDGE OF LUCY POINT CREEK CSZ AT POLLUTION LINE
16A-14	DOE CREEK BEHIND COASTAL SEAFOOD AND DATAW ISLAND
16A-18	EDDING CREEK AT SHRIMP DOCK
16A-19	UPPER REACHES ROCK SPRINGS CREEK
16A-23	EDDINGS CREEK AT TRIBUTARY BETWEEN STATIONS 9 AND 18
16A-24	JENKINS CREEK AT TURN BETWEEN STATIONS 11 AND 14
16A-25	JENKINS CREEK AT TRIBUTARY NORTH OF WARSAW ISLAND
16A-27	MOUTH OF COFFIN CREEK AT MORGAN RIVER
16A-28	HEADWATERS OF COFFIN CREEK AT SHRIMP DOCKS
16A-32	VILLAGE CREEK AT FRIPP POINT COMMUNITY DOCK
16A-33	LUCY POINT CREEK, APPROX. 3100 FEET WEST OF STATION 16A-13
16A-34	LUCY POINT CREEK, APPROX. 1900 FEET SOUTH OF STATION 16A-13
16A-35	WARSAW FLATS AT CONFLUENCE WITH MORGAN RIVER
16A-36	JENKINS CREEK AT SOUTHERN POINT OF DATAW ISLAND
16A-37	JENKINS CREEK AT POLAWANA ISLAND BOAT RAMP
16A-38	VILLAGE CREEK AT CONFLUENCE WITH SMALL UNNAMED TRIBUTARY ON WEST BANK
16A-39	MOUTH OF SPARROW NEST CREEK AT CONFLUENCE WITH MORGAN RIVER

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-090	GB	TERTIARY LIMESTONE	FROGMORE

All water samples collected from ambient monitoring well **AMB-090** met standards for Class GB groundwater.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME ERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
HALFMOON CREEK JAMES J. DAVIS ELEM. SCHOOL	SC0027481 MINOR DOMESTIC
CAMPBELL CREEK TO WHALE BRANCH ARRMAZ CUSTOM CHEMICALS	SC0000914 MAJOR INDUSTRIAL
MCCALLEYS CREEK SPRINGS INDUSTRIES/WAMCHEM NPL SITE	SC0046701 MINOR INDUSTRIAL

Municipal Separate Storm Sewer Systems (MS4)

<i>RECEIVING STREAM MUNICIPALITY RESPONSIBLE PARTY IMPLEMENTING PARTY</i>	<i>NPDES# MS4 PHASE MS4 SIZE</i>
COOSAW RIVER ----- CITY OF BEAUFORT PHASE CITY OF BEAUFORT SMALL CITY OF BEAUFORT	II MS4

Nonpoint Source Management Program

Land Disposal Activities

Land Application Sites

<i>LAND APPLICATION SYSTEM FACILITY NAME</i>	<i>ND# TYPE</i>
PONDS ND0076287 KALAMA SPECIALTY CHEMICALS, INC.	INDUSTRIAL
SPRAY SITES ND0083429 BJW&SA/ST. HELENA WWTP DOMES	TIC

Mining Activities

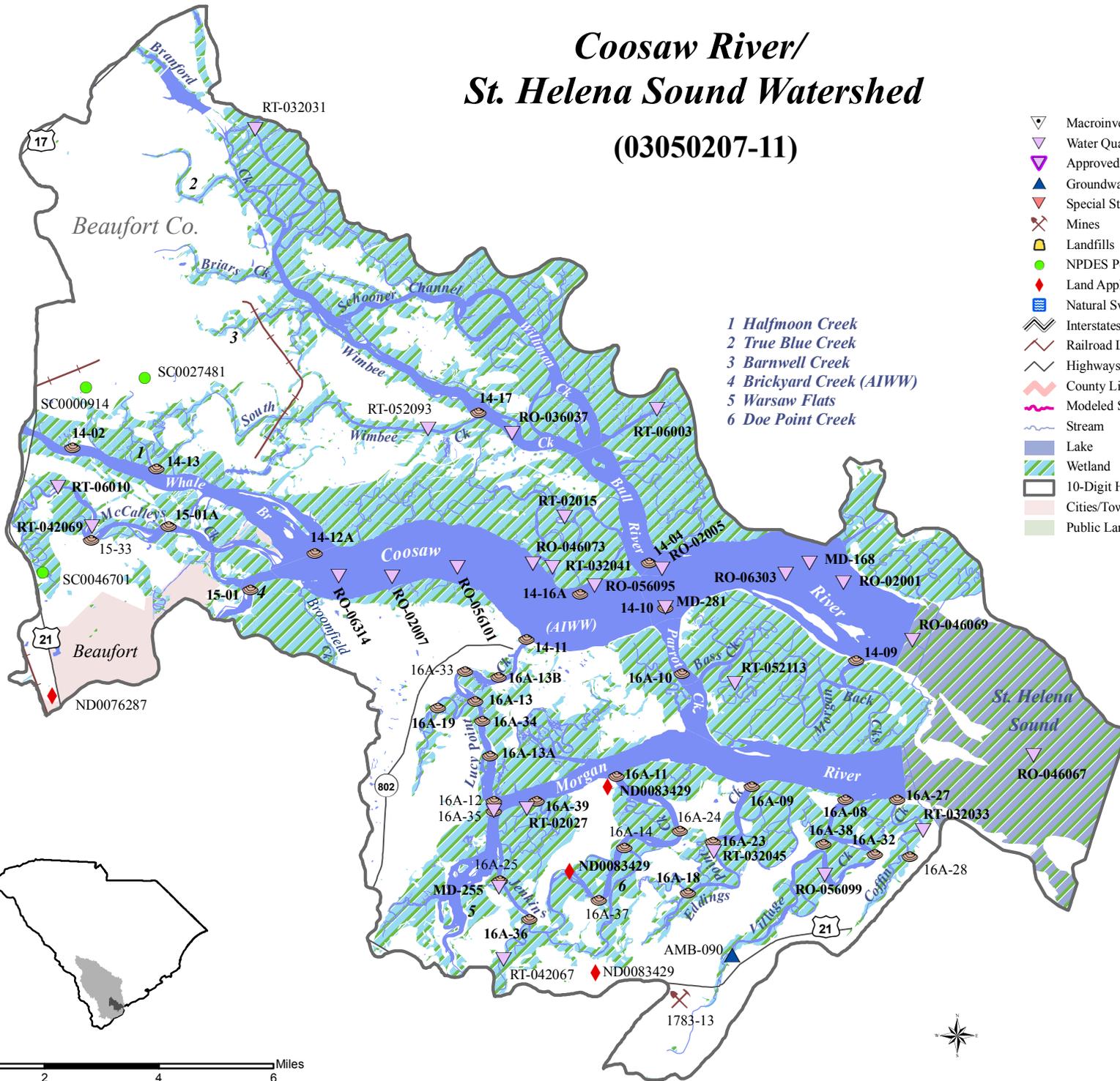
<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
JOCO CONSTRUCTION LLC SANDYS HICKORY HILL POND	1783-13 SAND

Growth Potential

There is a moderate potential for growth in this watershed, with the exception of the area surrounding the City of Beaufort. The City of Beaufort and Lady's Island, Burton, and Shell Point are projected to continue experiencing residential and commercial growth. Less than 25% of the total land area of Lady's Island, Burton or Shell Point is suitable for septic system installations; and another 25% or less is classified as marginally suitable. The majority of the watershed includes a collection of sea islands and Hunting Island State Park.

Coosaw River/ St. Helena Sound Watershed (03050207-11)

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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
- 🟦 Lake
- 🟩 Wetland
- 🏠 10-Digit Hydrologic Units
- 🏙 Cities/Towns
- 🟩 Public Lands

