

03050209-01

(Upper Santee Coastal Frontage Basin/Atlantic Intracoastal Waterway)

General Description

Watershed 03050209-01 (formerly a portion of 03050202-060) is located in Charleston County and consists primarily of the upper portion of the Santee Coastal Frontage Basin's **Atlantic Intracoastal Waterway** and its tributaries from Alligator Creek to Five Fathom Creek. The watershed occupies 26,731 acres of the Coastal Zone region of South Carolina. Land use/land cover in the watershed includes: 72.0% nonforested wetland, 12.2% water, 10.2% forested land, 3.4% forested wetland, 1.4% barren land, 0.6% agricultural land, and 0.2% urban land.

This watershed contains a portion of the Atlantic Intracoastal Waterway (AIWW), which flows past numerous sea islands and the tidally influenced creeks that separate them. This reach of the AIWW is classified SFH. The AIWW leaves the South Santee River Watershed and accepts drainage from Alligator Creek, Sall Creek, Ramhorn Creek, and Ormand Hall Creek. Ramhorn Creek connects to Alligator Creek which also drains to Cape Romain Harbor. Further along the AIWW moving southwest, the waterway accepts drainage from Casino Creek (Shrine Creek, Congaree Boat Creek, Mill Creek, Needles Eye Creek) and Dupre Creek. Casino Creek also drains into Cape Romain Harbor. A larger Dupre Creek joins Clubhouse Creek and together with Shrine Creek (Congaree Boat Creek) flows into Muddy Bay. Muddy Bay accepts drainage from Joe and Ben Creek, Oyster Bay, Little Papas Creek, Nellie Creek, and Horsehead Creek before draining into the Romain River and through Key Inlet to the Atlantic Ocean. Horsehead Creek drains into Cape Romain Harbor along with Deepwater Creek (Mill Den Creek) near Deepwater Point. Devils Den Creek also drains into the harbor and connects to the Romain River via Slack Reach. The Romain River accepts drainage from Nellie Creek (Papas Creek, Santee Path Creek, Key Creek, S Creek) before draining into the harbor near Cape Romain. Key Creek (Key Bay, Bay Creek) drains to the Atlantic Ocean via Raccoon Creek. Key Bay and Bay Creek also drain to the Atlantic Ocean via Clark Creek near Sandy Point. Little Papas Creek, Papas Creek, Santee Path Creek, Key Creek, and Clark Creek also share drainage with Five Fathom Creek in 03050209-02.

There are 3,361.3 acres of estuarine areas in this watershed. All streams draining into Cape Romain Harbor are classified ORW and those draining only into the AIWW are classified SFH. Additional natural resources in the watershed include the Cape Romain National Wildlife Refuge and portions of the Frances Marion National Forest.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
MD-265	INT	SFH/ORW	ALLIGATOR CREEK AT STATE SHELLFISH GROUND
RO-056100	RO-05	ORW	CASINO CREEK, 4.1MI ENE OF McCLELLANVILLE
MD-266	INT	SFH/ORW	CASINO CREEK AT CLOSURE LINE
RT-07048	RT-07	ORW	LITTLE PAPAS CK, 0.4MI SW OF MUDDY BAY

Alligator Creek (MD-265) – Aquatic life uses are not supported due to turbidity excursions. In addition, there are significant increasing trends in five-day biological oxygen demand and total phosphorus concentration. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standard violations. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration.

Casino Creek – There are two water quality monitoring sites along Casino Creek. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in such systems and were considered natural, not standard violations. At the upstream site (**RO-056100**), aquatic life and recreational uses are fully supported. At the downstream site (**MD-266**), aquatic life uses are fully supported; however, there is a significant increasing trend in five-day biological oxygen demand. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are fully supported.

Little Papas Creek (RT-07048) - Aquatic life and recreational uses are fully supported. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standard violations.

A fish consumption advisory has been issued by the Department for mercury and includes the Atlantic Ocean edging this watershed. Fish tissue samples from Muddy Bay and Cape Romain indicate no advisories are needed at this time. For more information and the most current advisory, visit <http://www.scdhec.gov/fish>.

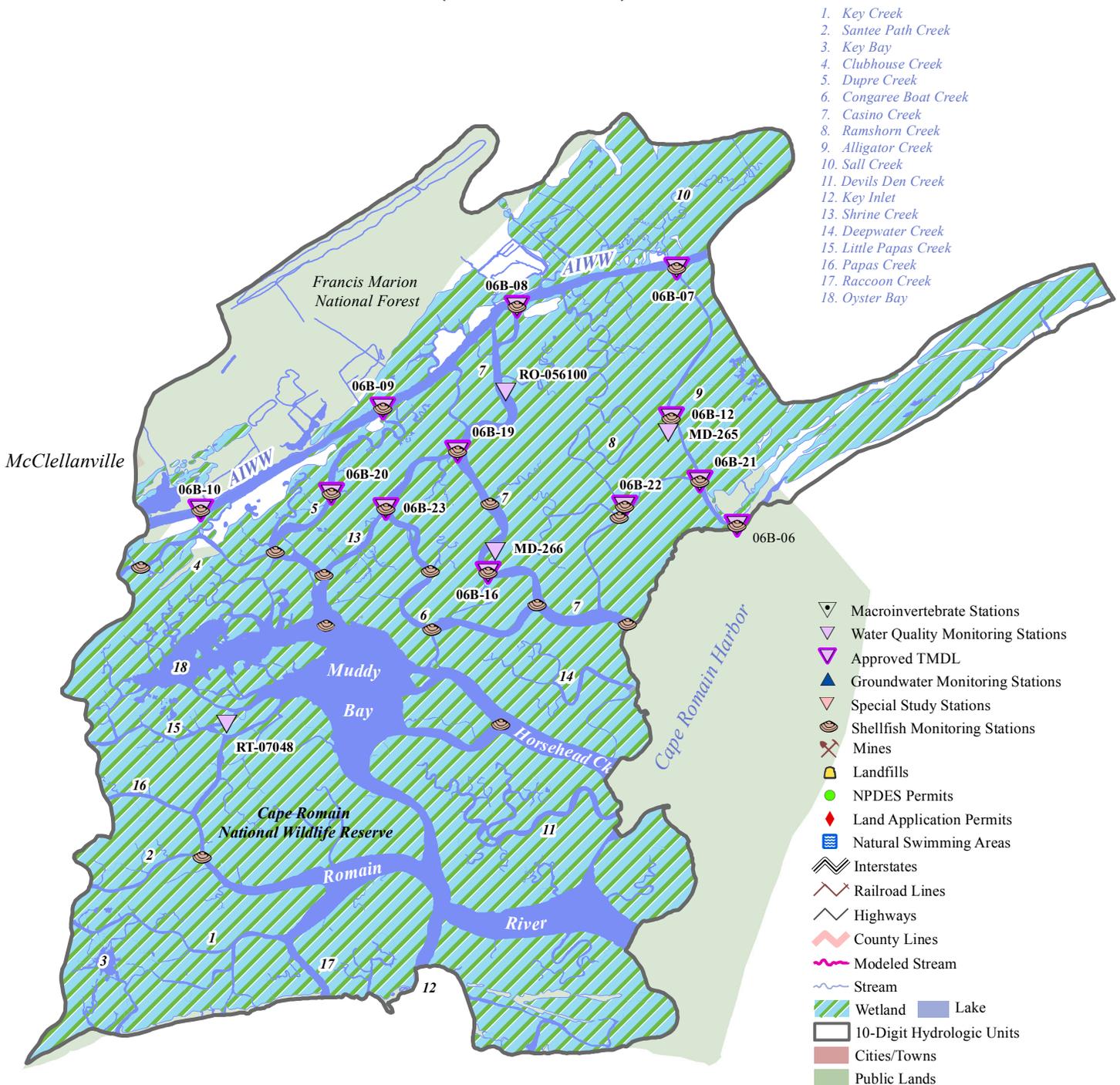
Shellfish Monitoring Stations

Station #	Description
06B-06	ALLIGATOR CREEK AT CAPE ROMAIN HARBOR
06B-06A	NORTH END OF CAPE ROMAIN HARBOR
06B-07	ALLIGATOR CREEK AT MARKER 26
06B-08	CASINO CREEK AT MARKER 26
06B-09	DUPREE CREEK – 500 FT N OF NEW DOCK
06B-10	AIWW AT MARKER 32
06B-12	ALLIGATOR CREEK STATE SHELLFISH GROUND
06B-15	CASINO CREEK AT CAPE ROMAIN HARBOR
06B-16	CASINO CREEK MIDWAY BETWEEN STATION 19&24 (AT SMALL S.BOUND UNNAMED CREEK ON RIGHT)
06B-17	CONGAREE BOAT CREEK AT TOWER CREEK
06B-18	CONFLUENCE OF DUPREE CREEK AND CLUBHOUSE CREEK
06B-19	CONFLUENCE OF CASINO CREEK AND SHRINE CREEK
06B-19A	CASINO CREEK, MIDWAY BETWEEN STATIONS 06B-19 & 06B-16 AT UNNAMED CREEK
06B-20	1,000 YDS UPSTREAM DUPREE CREEK FROM CLUBHOUSE CREEK
06B-21	CONFLUENCE OF ALLIGATOR CREEK AND RAMHORN CREEK
06B-22	CONFLUENCE OF RAMHORN CREEK AND MILL CREEK
06B-22A	MILL CREEK AT RAMHORN CREEK
06B-23	CONFLUENCE OF SHRINE CREEK AND CONGAREE BOAT CREEK
06B-24	CONFLUENCE OF CASINO CREEK AND CONGAREE BOAT CREEK
06B-25	CONFLUENCE OF HORSEHEAD CREEK AND UNNAMED CREEK AT LOWER END OF HORSEHEAD ISLAND
06B-26	CONFLUENCE OF SHRINE CREEK AND UNNAMED CREEK N. OF MUDDY BAY
06B-27	CONFL. OF FIRST LARGE CREEK ON THE LEFT, WITH CONGAREE BOAT CREEK, TRAVELING SE OF STA.23
07-08	CLUBHOUSE CREEK – ¼ MI N. OF FIVE FATHOM CREEK
07-08A	OYSTER BAY AT MUDDY BAY

Growth Potential

There is a low potential for growth in this watershed, which contains no municipalities. Although the adjacent McClellanville area experiences scattered low density development, significant growth is not anticipated.

Upper Santee Coastal Frontage Basin/ Atlantic Intracoastal Waterway Watershed (03050209-01)



1. Key Creek
2. Santee Path Creek
3. Key Bay
4. Clubhouse Creek
5. Dupre Creek
6. Congaree Boat Creek
7. Casino Creek
8. Ramshorn Creek
9. Alligator Creek
10. Sall Creek
11. Devils Den Creek
12. Key Inlet
13. Shrine Creek
14. Deepwater Creek
15. Little Papas Creek
16. Papas Creek
17. Raccoon Creek
18. Oyster Bay

- ▽ Macroinvertebrate Stations
- ▽ Water Quality Monitoring Stations
- ▽ Approved TMDL
- ▲ Groundwater Monitoring Stations
- ▽ Special Study Stations
- Shellfish Monitoring 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

