

Specifications of
Continuous Monitoring
Stations

APPENDIX B

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Specifications of Continuous Monitoring Stations

STATION GPA-02

Station Location: Savannah River Buoy G"33", near Fields Cut (RM +4.5)

Station Coordinates: Latitude: 32° 03' 59.49"
Longitude: 80° 57' 09.45"

Instruments: YSI Water Quality Meter at 1 meter above bottom in pedestal
YSI Water Quality Meter at 1 meter below surface attached to buoy

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Buoy Flashing G"33" is located to the south of Jones Island between Venus Point and Fields Cut. The buoy anchor is an 8,500 lb concrete sinker located in approximately 48 feet of water at MLW. The buoy consists of two drums (upper one is 6 feet in diameter, and the lower one with 2.5 feet in diameter) connected by a 12 ¾-inch stem. The surface YSI instrument was placed in a sleeve that was strapped to the 2.5-foot diameter drum. The bottom of the surface instrument was 1 meter below the water surface and would rise and fall with the buoy. The bottom mount was installed approximately 120 feet from the 8,500-pound sinker on the bottom of the channel and was secured by a nylon, weighted line that was attached to 15 feet of 5/16-inch chain on the sinker weight. The chain from the mount was looped through the buoy chain link with a slip shackle.

STATION GPA-03

Station Location: South Channel (RM 5.5)

Station Coordinates: Latitude: 32° 03' 43.98"

Longitude: 80° 57' 58.32"

Instruments: YSI Water Quality Meter at 1 meter above bottom in pedestal

Parameters: Water Surface Elevation

Temperature

Conductivity (Salinity)

Dissolved Oxygen

pH

“As Built” Description:

Station GPA-03 is located in South Channel down river from Elba Island Cut. A YSI water quality instrument sleeve is banded to a concrete pedestal placed in the middle of the mid-point of the South Channel cross section. A plastic buoy is attached to the concrete pedestal to mark the position of the pedestal. The YSI is placed into the sleeve and is not connected to the buoy line from the pedestal. The bottom of the instrument is located 1 meter above the bottom.

STATION GPA-04

Station Location: Savannah River Buoy R"52", near Fort Jackson (RM +10.4)

Station Coordinates: Latitude: 32° 05' 18.72"
Longitude: 81° 01' 35.16"

Instruments: YSI Water Quality Meter at 1 meter below surface attached to buoy
YSI Water Quality Meter at 1 meter above bottom in pedestal
RDI 1200 KHz Acoustic Doppler Current Profiler

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Water Velocity (Magnitude and Direction at several depths)

"As Built" Description:

Buoy R"52" is located in the main channel near Ft. Jackson. The buoy anchor is an 8,500 lb concrete sinker located in approximately 45 feet of water at MLW. The buoy consists of two drums (upper one is 6 feet in diameter, and the lower one with 2.5 feet in diameter) connected by a 12 ¾-inch stem. The surface YSI instrument was placed in a sleeve that was strapped to the 2.5-foot diameter drum. The bottom of the surface instrument was 1 meter below the water surface and would rise and fall with the buoy. The bottom mount was installed approximately 70 feet towards the center of the channel from the 8,500-pound sinker on a hard sand bottom of the channel and was secured by a nylon, weighted line that was attached to 15 feet of 5/16-inch chain on the sinker weight. The ADCP bottom mount was also deployed approximately 70 feet on a sand bottom in the channel from the sinker weight and was secured by a nylon, weighted line that was attached to 15 feet of 5/16-inch chain on the sinker weight. The chain from the YSI and ADCP mount was looped through the buoy chain link near the weight (1 foot a part) with slip shackles.

STATION GPA-05

Station Location: Back River, Upstream the Tide Gate, on Talmadge Bridge (RM +14.5)

Station Coordinates: Latitude: 32° 05' 55.04"
Longitude: 81 ° 05' 28.04"

Instruments: YSI Water Quality Instrument 1 meter from bottom mounted to
Talmadge Bridge

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

The YSI Water Quality instrument was placed in a sleeve that was banded to the 8th pile from the left bank (facing upstream) of the Highway 17 Bridge (Talmadge Bridge) on the Back River. The instrument was located approximately 1 meter above the bottom in 10 feet of water at low tide. The dive crew used the same spray paint mark “5” on the bridge pile from the 1997 data collection to identify location for the 1999 deployment. The instrument was on the north side of the downstream pile.

STATION GPA-21

Station Location: Front River at the Army Corps Depot Facility (RM +13.9)

Station Coordinates: Latitude: 32° 04' 48.83"
Longitude: 81° 04' 48.75"

Instruments: YSI Water Quality Meter at 1 meter below surface attached to dock
YSI Water Quality Meter at 1 meter above bottom in pedestal
YSI Data Collection Platform (DCP) 6200 Meteorological Station

Parameters:	Water Surface Elevation	Air Temperature
	Water Temperature	Wind Speed and Direction
	Conductivity (Salinity)	Rainfall
	Dissolved Oxygen	Relative Humidity
	pH	Barometric Pressure
		Solar Radiation

“As Built” Description:

A meteorological station was established at the Army Corps of Engineers Depot Facility at the juncture of the floating dock and the concrete bulkhead. The station consisted of a YSI 6200 Data Collection Platform (DCP) that enabled the data collection manager to dial in via a cellular phone modem to download data in real-time. The meteorological station consisted of sensors that measure the parameters above and 2 water quality meters that were plugged in to the DCP. The surface YSI water quality meter was secured to the floating dock with a plastic tie-wrap and 50-foot cable to the DCP. The bottom YSI water quality meter was deployed in a bottom pedestal at the toe of the channel bottom with a 250-foot cable. The cable was tied to the tag line of the pedestal that ran up the slope of the channel to the corner of the dock and attached to the base of one of the piles. All of the data at GPA-21 was collected and stored by the DCP and downloaded to the field laptop one time per day.

STATION GPA-06

Station Location: Front River above Talmadge Bridge at first group of abandoned steel sheet piles of the north side of the channel (RM +16.6)

Station Coordinates: Latitude: 32° 05' 53.27"
Longitude: 81° 06' 31.50"

Instruments: YSI Water Quality Meter at 1 meter below surface on a spar buoy
YSI Water Quality Meter at 1 meter above bottom in pedestal
RDI 1200 KHz Acoustic Doppler Current Profiler

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Water Velocity (Magnitude and Direction at several depths)

“As Built” Description:

An abandoned steel pile structure extends into the Front River approximately 50 feet from the shoreline. This structure is located in approximately 20 feet of water and consists of 5 driven piles. The surface water quality meter was fastened to a spar buoy that was secured by a 5/16-inch chain on the most upstream pile. The instrument floated at approximately 1 meter below the surface. The depth of water increased rapidly moving away from this structure and is near 40 feet MLW within 50 feet of the structure. The second YSI water quality meter was deployed on a concrete bottom pedestal in the toe of the channel that was approximately 200 feet from the sheet pile in 47 feet of water at mid-tide. The bottom YSI pedestal was secured by a yellow polypropylene tag line to the pile next to the one secured by the spar buoy. An ADCP was deployed by a concrete bottom pedestal in 37-feet of water at low tide. A white nylon tag line secured to the pedestal to the most downstream pile in the group.

STATION GPA-22

Station Location: Kings Island Turning Basin on the Front River on Channel Markers R12 and R16 (RM +18.7)

Station Coordinates: Latitude: 32° 07' 54.51"
Longitude: 81° 08' 09.97"

Instruments: YSI Water Quality Meter at 1 meter below surface on spar buoy
YSI Water Quality Meter at 1 meter above bottom in pedestal

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Channel marker R12 is the southeastern portion of the Kings Island Turning Basin. The original deployment site for the surface and bottom instruments was on Channel Marker R16 that was adjacent to the channel on the northern portion of the turning basin. The Corps of Engineers was performing operation and maintenance dredging from July 28 to August 5 in the channel at the upstream half of the turning basin and would have interfered with any equipment at R16. The bottom and surface instruments were deployed at R12 and then moved to R16 (closer to the channel) after the dredging was terminated. The surface instrument was deployed on a spar buoy. The bottom instrument was deployed on a bottom concrete pedestal in approximately 42 feet of water at high tide. The pedestal was placed on a silty bottom at 120 feet from Channel Marker R12.

STATION GPA-07

Station Location: Little Back River (RM 18.9)

Station Coordinates: Latitude: 32° 08' 48.72"

Longitude: 81° 07' 02.12"

Instruments: YSI Water Quality Meter at 1 meter below surface on spar buoy

Parameters: Water Surface Elevation

Temperature

Conductivity (Salinity)

Dissolved Oxygen

pH

“As Built” Description:

Station GPA-07 is located in the Little Back River just upriver from Hog Island. The YSI Water Quality surface instrument was deployed in a sleeve banded to spar buoy. The spar buoy design is illustrated and labeled in Figure 2-4. The concrete anchor was placed approximately 20 feet from the east shore. Hurricane anchors were screwed into the river bottom to secure the concrete anchor. A length of 5/16 inch chain secured the concrete anchor to the hurricane anchor. The buoy maintained approximately 1 ft of free board and was described as listing slightly in the current. The bottom of the instrument placed in the sleeve banded to the base of the spar buoy therefore remained approximately 1 meter below the water surface. The spar buoy floated with the tidally influenced water elevation.

STATION GPA-08

Station Location: Front River near the end of the Maintained Channel at Channel Marker R28 (RM +20.5)

Station Coordinates: Latitude: 32° 09' 13.22"
Longitude: 81° 09' 06.35"

Instruments: YSI Water Quality Meter at 1 meter below surface on spar buoy
YSI Water Quality Meter at 1 meter above bottom in pedestal

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Day mark R”28” is located along the north side of the Front River approximately 50 feet from the shoreline. The depth at this mark is approximately 24 feet. The surface instrument was mounted on the Day mark pile approximately 1.5 meters below the MLW mark. The bottom instrument was mounted on a concrete pedestal in approximately 40 feet below MLW. The concrete pedestal was placed in the navigation channel on a silty bottom 40 feet away from away from the base of the Day mark pile structure. A white nylon tag line is secured to the concrete pedestal and is attached to the base of the Day mark pile structure. The bottom instrument was mounted to the concrete pedestal such that the base of the instrument is one meter above the bottom.

STATION GPA-09

Station Location: Front River at Houlihan Bridge just upriver from Maintained Channel
(RM 20.5)

Station Coordinates: Latitude: 32° 09' 55.32"
Longitude: 81° 09' 21.47"

Instruments: YSI Water Quality Meter at 1 meter below surface on track mount
YSI Water Quality Meter with Chloride probe at 1 meter above bottom
on bridge fender system

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
Chloride
pH

“As Built” Description:

Houlihan Bridge is mounted on the HW 17 bridge where it crosses the Front River at RM 21.5. The surface meter was placed in a track mount system that was secured to a concrete pile of the Houlihan Bridge. A detailed description of the track mount design is provided in section 2.6 and is illustrated in Figure 2-7. The track system was secured to the outside pile on the North side of the bridge in the third row of support piles east from the Houlihan Swing Bridge. Steel banding was used to secure the track mount system to the bridge pile. The bottom of the track system was approximately 10 feet above the bottom. The surface instrument was placed in a sleeve such that the bottom of the instrument would remain one meter below the water as the sled floated with the tidally influenced water elevation. The track mount system was placed on the outside face of the square concrete pile facing north. The bottom instrument was placed in a sleeve that was banded to a wood pile, close to the USGS gage station, in the Houlihan Swing Bridge Fender System. The bottom of the instrument was 1 meter above the bottom. A chloride probe was added to the bottom YSI water quality meter at this station.

STATION GPA-10

Station Location: Middle River at Houlihan Bridge (RM 21.8)

Station Coordinates: Latitude: 32° 09' 56.72"
Longitude: 81° 08' 16.89"

Instruments: YSI Water Quality Meter at 1 meter below water surface on track mount

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Houlihan Bridge is where HW 17A crosses the Middle River at RM 21.8. An instrument sleeve was banded with steel straps to a concrete pile in the eighth row of concrete support piles from the west shore of Middle River. The sleeve was located on the north outside concrete pile on the north face. The instrument was placed in the sleeve and the bottom of the instrument was approximately 1 meter below MLW.

STATION GPA-15

Station Location: Little Back River at Houlihan Bridge (HW 17) (RM 20.9)

Station Coordinates: Latitude: 32° 09' 57.13"
Longitude: 81° 07' 48.17"

Instruments: YSI Water Quality Meter at 1 meter below surface on Bridge pile

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Houlihan Bridge is where HW 17A crosses Little Back River. An instrument sleeve was banded to the north face of the north concrete pile in the fourth row of concrete support piles from the west shore of Little Back River. The instrument was placed in the sleeve. The elevation of the bottom of the instrument is approximately 1 meter below MLW.

STATION GPA-11R

Station Location: Front River upriver from Mulberry Grove (RM 23.4)

Station Coordinates: Latitude: 32° 11' 19.80"

Longitude: 81° 09' 05.40"

Instruments: YSI Water Quality Meter 1 meter above bottom in pedestal with
Chloride probe

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
Chloride
pH

“As Built” Description:

Station 11R is located upriver from Houlihan Bridge on the Front River. An instrument sleeve was banded to a concrete pedestal placed in approximately 30 feet of water at mean low water. The concrete pedestal was located approximately 80 feet west from the shore of Ursala Island in the deepest portion of the river cross section. A nylon rope was secured to the base of the concrete pedestal and attached to a temporary marker on the shore of Ursala Island. The instrument was placed in the sleeve and the bottom of the instrument was approximately 1 meter above the bottom. A chloride probe was added to the YSI water quality meter at this station.

STATION GPA-12R

Station Location: Middle River, upriver from Houstown Cut (RM 23.7)

Station Coordinates: Latitude: 32° 11' 40.44"

Longitude: 81° 08' 18.12"

Instruments: YSI Water Quality Meter at 1 meter below surface on spar buoy

Parameters: Water Surface Elevation

Temperature

Conductivity (Salinity)

Dissolved Oxygen

pH

“As Built” Description:

Station GPA-12R is located in the Middle River just upriver from Steamboat River and Houstown Cut. The YSI Water Quality surface instrument was deployed in a sleeve banded to spar buoy. The spar buoy design is illustrated and labeled in Figure 2-4. The concrete anchor was placed approximately 20 feet from the west shore. Hurricane anchors were screwed into the river bottom to secure the concrete anchor. A length of 5/16 inch chain secured the concrete anchor to the hurricane anchor. The buoy maintained approximately 1 ft of free board and was described as listing slightly in the current. The bottom of the instrument placed in the sleeve banded to the base of the spar buoy therefore remained approximately 1 meter below the water surface. The spar buoy was given enough anchor chain and rope to float with the tidally influenced water elevation.

STATION GPA-14

Station Location: Savannah River at I-95 Bridge (RM 27.7)

Station Coordinates: Latitude: 32° 13' 55.01"

Longitude: 81° 08' 43.78"

Instruments: YSI Water Quality Meter at 1 meter above the bottom
Coastal Leasing MacroTide CTD with a TempHion Chloride sensor and
a TempHion Bromide sensor at 1 meter above the bottom
Aquadopp current meter at 1 meter above the bottom

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
Chloride
Bromide
Water Velocity (Magnitude and Direction)
pH

“As built” Description:

I-95 Bridge is upriver from McCoy's Cut where Interstate 95 crosses the Savannah River. Sleeves for the YSI Water Quality Meter, Coastal Leasing MacroTide, and Aquadopp were banded to the I-95 Bridge Fender System. The sleeve for the YSI instrument from the 1997 Data collection was reused for the 1999 Data collection. An elevation of 1 meter from the bottom to the bottom of YSI instrument was reconfirmed before deciding to reuse the YSI sleeve. The Coastal Leasing MacroTide and Aquadopp sleeves were attached to wood piles in the Bridge Fender System using steel banding. The YSI sleeve and Coastal Leasing MacroTide CTD mount were on the first upriver single piling from the downriver side of the North Fender. The Aquadopp sleeve was installed two pilings upriver on the next single piling. Each mount was attached on the channel side of the fender system facing the channel and the South Fender. The bottoms of the instruments were approximately 1 meter above the channel bottom. Channel depth between the I-95 Fenders is approximately 14.5 feet deep. The channel

between the two fenders is the deepest in the cross section of the river where I-95 Bridge crosses the Savannah River. The Coastal Leasing MacroTide CTD sleeve was a large enough diameter to allow the Chloride and Bromide TempHions to be secured along the housing of the MacroTide CTD while placed in the mount.

STATION GPA-16

Station Location: Savannah River at Day mark R"2", upriver from Big Collis Creek
(RM 30.2)

Station Coordinates: Latitude: 32° 15' 49.07"
Longitude: 81° 08' 39.59"

Instruments: YSI Water Quality Meter at mid-depth
Coastal Leasing MacroTide CTD with a TempHion Chloride sensor and
a TempHion Bromide sensor at mid-depth
Aquadopp current meter at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Chloride
Bromide
Water Velocity (magnitude and direction)

"As Built" Description:

Station GPA-16 is located at a flow diversion structure on the west shore of the Savannah River upriver from I-95 Bridge and the entrance to Abercorn Creek. The flow diversion structure has Day mark R"2" mounted on the end furthest from the shore. Sleeves for the YSI Water Quality Meter, Coastal Leasing MacroTide, and Aquadopp were banded to wood piles of the flow diversion structure facing the opposite shore. The YSI Water Quality Meter, Coastal Leasing MacroTide CTD and Aquadopp mounts were placed in the sleeves on the grouping of pilings at the end of the flow diversion structure. The instrument bottoms were elevated approximately 1 meter above the bottom to represent a mid-depth elevation at MLW.

STATION GPA-18

Station Location: Abercorn Creek, Downstream of City Raw Water Intake, near Gayland Creek (RM 28.9)

Station Coordinates: Latitude: 32° 15' 03.04"
Longitude: 81° 09' 27.41"

Instruments: YSI Water Quality Meter at mid-depth
Coastal Leasing MacroTide CTD with a TempHion Chloride sensor and a TempHion Bromide sensor at mid-depth
Aquadopp current meter at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Chloride
Bromide
Water Velocity (magnitude and direction)

“As Built” Description:

Station GPA-18 is located in Abercorn Creek just upstream from the entrance from Savannah River. The YSI Water Quality Meter, Coastal Leasing MacroTide, and Aquadopp were deployed in sleeves banded to a concrete pedestal. The concrete pedestal was located approximately 20 feet from the north shore of Abercorn Creek in the deepest portion of the Creek cross section. The Aquadopp transducer faces were orientated toward the opposite shore to measure flow passing in Abercorn Creek relative to the station. A tag line was secured to the concrete mount and attached to a temporary marker on the north shore of the Creek. The bottoms of the instruments were approximately 1 meter above the bottom.

STATION GPA-19

Station Location: Abercorn Creek at City Raw Water Intake (RM 30.5)

Station Coordinates: Latitude: 32° 14' 59.57"

Longitude: 81° 10' 27.24"

Instruments: YSI Water Quality Meter at mid-depth
Coastal Leasing MacroTide CTD with a TempHion Chloride sensor and
a TempHion Bromide sensor at mid-depth
Aquadopp current meter at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Chloride
Bromide
Water Velocity (magnitude and direction)

“As Built” Description:

Station GPA-19 is located in Abercorn Creek at the City Raw Water Intake. The YSI Water Quality Meter, Coastal Leasing MacroTide, and Aquadopp were deployed in sleeves banded to a concrete pedestal. The concrete pedestal was located approximately 20 feet from the outermost piling in the downriver grouping of pilings at the City Raw Water Intake facility to distance the instruments from the water intakes. A tag line was secured to the concrete mount and attached to base of the outermost concrete piling. The water depth at the pedestal was approximately 24 feet. The bottoms of the mounts were elevated to be 1 meter above the bottom.

STATION GPA-20

Station Location: Abercorn Creek, Upriver from City Raw Water Intake (RM 31.2)

Station Coordinates: Latitude: 32° 15' 24.04"

Longitude: 81° 10' 24.31"

Instruments: YSI Water Quality Meter at mid-depth
Coastal Leasing MacroTide CTD with a TempHion Chloride sensor and
a TempHion Bromide sensor at mid-depth
Aquadopp current meter at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH
Chloride
Bromide
Water Velocity (magnitude and direction)

“As Built” Description:

The YSI Water Quality Meter, Coastal Leasing MacroTide, and Aquadopp were placed in mounts attached to a concrete pedestal. The concrete pedestal was approximately 20 feet from the east shore in the deepest area of the river cross section. A tag line was secured to the concrete mount and attached to base of partially submerged Oak Tree. The depth at the pedestal was approximately 20 feet. The mounts were elevated to be 1 meter above the bottom.

STATION GPA-17

Station Location: Savannah River, downriver of Ebenezer Landing (RM 43.0)

Station Coordinates: Latitude: 32° 21' 41.70"

Longitude: 81° 10' 02.99"

Instruments: YSI Water Quality Instrument at 1meter below surface
YSI Water Quality Instrument at 1 meter above bottom
Coastal Leasing Macrotide CTD Meteorological Data Recorder

Parameters:	Water Surface Elevation	Air Temperature
	Water Temperature	Wind Speed and Direction
	Conductivity	Rainfall
	Dissolved Oxygen	Relative Humidity
	pH	Barometric Pressure
		Solar Radiation

“As Built” Description:

Station GPA-17 is located at the second flow diversion structure downriver from Ebenezer Landing. Three flow diversion structures are located between Ebenezer Landing and Little Kiffer Point. The YSI Water Quality Meter, Coastal Leasing Macrotide CTD and Aquadopp were deployed in sleeves banded to the wood pilings at the end of the flow diversion structure. The instrument bottoms were approximately 1 meter above the bottom to represent a mid-depth elevation. A meteorological station was also installed on the flow diversion structure at GPA-17. The wind meter, data recorder, rain gauge and solar radiation sensor were all mounted on pilings at the mid-lengths of the flow diversion structure.

STATION GPA-23

Station Location: Wilmington River (RM 8.8)

Station Coordinates: Latitude: 32° 04' 19.98"
Longitude: 81° 00' 26.88"

Instruments: YSI Water Quality Instrument at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Station GPA-23 is located at Marker R “A14” in the Willington River. The YSI Water Quality Instrument was deployed in a sleeve banded to the north side of the marker pile. The instrument bottom elevation was approximately 1.5 feet above the bottom to represent the mid depth.

STATION GPA-24

Station Location: Elba Island Cut (RM 7.5)

Station Coordinates: Latitude: 32° 04' 06.30"
Longitude: 80° 58' 53.58"

Instruments: YSI Water Quality Meter at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Station GPA-24 is located at Marker FL R”6” at the intersection of Elba Island Cut and South Channel. The YSI Water Quality Meter sleeve is banded to the marker pile with steel banding and a banding tool. The sleeve was placed on the northwest face of the pile facing the channel, in Elba Island Cut. The base of the mount was 7.0 feet off the channel bottom to represent mid-depth at MLW.

STATION GPA-25

Station Location: Fields Cut

Station Coordinates: Latitude: 32° 04' 31.03"
Longitude: 80° 57' 38.29"

Instruments: YSI Water Quality Instrument at mid-depth

Parameters: Water Surface Elevation
Temperature
Conductivity (Salinity)
Dissolved Oxygen
pH

“As Built” Description:

Station GPA-25 is located at the front range of the Long Island Range. The YSI Water Quality Instrument sleeve was banded to the northeast pile of the front range superstructure. The northeast pile is the closest pile to the Savannah River. The mount was placed 3 feet above the bottom to represent the mid-depth at MLW.

STATION GPA-26

Station Location: Savannah River at Fort Pulaski

Station Coordinates: Latitude: 32° 02' 02"
Longitude: 80° 53' 30"

Instruments: YSI Water Quality Instrument at 1 meter below surface
YSI Water Quality Instrument at 1 meter above bottom
Coastal Leasing Macro CTD Meteorological Data Recorder

Parameters:	Water Surface Elevation	Air Temperature
	Water Temperature	Wind Speed and Direction
	Conductivity	Rainfall
	Dissolved Oxygen	Relative Humidity
	pH	Barometric Pressure
		Solar Radiation

“As Built” Description:

Station GPA-26 is located near Ft. Pluaski on the Savannah River Navigation Channel. The surface sleeve for the YSI Water Quality Meter was banded to the navigation buoy FL G”25”. The buoy consists of two drums (upper one with 6' diameter, and the lower one with 2.5' diameter) connected by a 12 ¾-inch stem. The top of the surface sleeve was placed 2 feet below the bottom of the upper drum and banded with steel straps to the stem. The bottom instrument mount was deployed in a sleeve banded to a concrete pedestal. The concrete pedestal was placed on the channel bottom 120 feet away from the 8500 lb concrete anchor toward the navigation channel. A tagline was attached from the concrete pedestal to the 8500 lb concrete sinker anchor chain. A length of 5/16 inch chain and a slip shackle attach to the anchor chain. The sleeves banded to the concrete pedestal are approximately 1 meter above the bottom. The weather station was installed on the fixed pier at the Bar Pilots Station on Cockspur Island, just upriver from the FL G”25” buoy. The wind meter was mounted on top of 25 ft steel pole supported by one of the pilings on fixed pier. The Rain Gauge was mounted on

a 6 ft branch at mid-height of the steel pole. The data recorder and solar radiation sensor were mounted on the walkway superstructure.