



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Sister River Mouth

Date:

7/16/18
(mm/dd/yyyy)

WIN/ Field ID: G3NW0154

WBID: 951

Latitude: 30.39612

(Decimal Degrees)

County: Walton

ORG ID: 21FLPNS

Longitude: -86.051034

(Decimal Degrees)

Receiving Body of Water: Choctawhatchee River

RQ-2018- 2018-07-23-22

Sampling Team Members

MILE KING
NATHAN MURPHY

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other

Depth Measured with
Equipment ID

Collection Method

☒ Wading ☐ Canoe/Kayak
☐ From Shore ☐ Electric Motor
☐ Other ☒ Gasoline Motor

Water Level: Dry/ Pooled/ Low Normal / High / Flooded

Meter ID# 154179

PODS

Matrix: Fresh / Marine / DI

Photos: Yes / No

Flow: No Flow / Intestinal / Flowing / NA

Tide: Rising/ Falling/ Slack/ NA

Tide Times: High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1215	4.2	0.3	0.7	4.42	57.3	6.65	0.04	88.8	28.9
CEN			3.7		3.72	47.0	6.59	0.04	92.5	27.6

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	SN 8101020	4/11/2019	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 um Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Place Preservative Sticker(s) Here
(If Available)

Field/WIN ID



G3NW0154

Location:



SISTER RIVER MOUTH

Place Label Here

Signature:

Date:

7/17/18

Enter Field Parameters, Verify Station ID In LIMS DMT:

QC Station ID, Field Parameters In LIMS DMT:

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

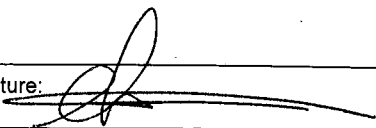
SAMPLING AGENCY: FDEP NW KOC		STORET STATION NUMBER: G3NW0154	DATE (MM/DD/YY): 7/16/18	RECEIVING BODY OF WATER: Choctawhatchee R.
REMARKS: SB1024 72612	COUNTY: WALTON	LOCATION: Sister River Mouth	FIELD ID/NAME: G3NW0154	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>11</u>	20 19 18 17 16	15 14 13 12 <u>11</u>	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>6</u>	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 <u>6</u>	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>12</u> ----- Primary Score <u>49</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 <u>12</u> 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>20</u>	<u>20</u> 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank <u>10</u> Left Bank <u>10</u>	<u>10</u> 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>10</u>	<u>10</u> 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>80</u>	<u>10</u> 9	8 7 6	5 4	3 2 1

129

TOTAL SCORE

HA ID 15253

Date: 7/17/18	Analyst: WAKE KMG	Signature: 
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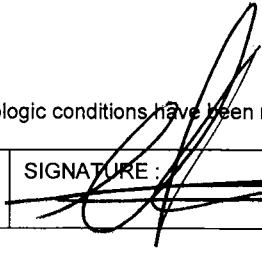
DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 78612 ORG ID 21FLPNS LATITUDE 30.3982
 COUNTY WALTON STORET # G3NW0154 LONGITUDE 86.05079
 DATE 7/16/18 TIME 1215 SAMPLING AGENCY PDEP NW R0C
 SITE NAME Old Sister River MOUTH
 FIELD ID/NAME G3NW0154 RECEIVING BODY OF WATER choctawhatchee R.

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ Silviculture ☒ Field/Pasture ☒ Agricultural ☒ Residential ☒ Commercial ☐ Industry ☐ Other (Specify) ☐							Landscape Development Intensity Index (LDI) 		
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy							Typical Width (m) Depth (m)/Velocity (m/sec) Transect 4 m wide		
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 18 Right Bank: 18				Hydrologic Modification Score (per FT 3101) 				0.33 m/s 1.33 m/s 0.33 m/s	
High Water Mark: 1.0 + 4.2 = 5.2 (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				4.0 m deep 4.02 m deep 4.0 m deep	
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ Recent, severe				Canopy Cover % ☒ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☐ Moderate Shaded (46-80%)					

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse			Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):			Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐																																						
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☐ LVS ☐ BioRecon ☐ < 2 m ² SAV Woody Debris (Snags)... 3.6 5 Undercut Banks / Roots 0.3 5 Leaf Packs or Mat 1 3 Aquatic Vegetation 1.5 5 Rock or Shell Rubble.. Sand..... 44 2 Mud / Muck / Silt Other Other			WATER QUALITY <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td> 0.3 </td> <td> 28.9 </td> <td> 6.65 </td> <td> 4.42 </td> <td> 57.3 </td> <td> 88.8 </td> <td> 0.04 </td> <td> 0.7 </td> </tr> <tr> <td>Middle:</td> <td> 3.7 </td> <td> 27.4 </td> <td> 6.59 </td> <td> 3.72 </td> <td> 47.0 </td> <td> 92.5 </td> <td> 0.04 </td> <td> </td> </tr> <tr> <td>Bottom:</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> Meter ID: 154179 Meter verify? ☒ Yes ☐ No Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: SA8101020 Exp: 4/11/2019 Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: Exp: Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☐ Slightly Turbid ☐ Turbid ☒ Opaque ☐							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	0.3	28.9	6.65	4.42	57.3	88.8	0.04	0.7	Middle:	3.7	27.4	6.59	3.72	47.0	92.5	0.04		Bottom:								
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Bottom:																																												
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☐ ☒ Iron/Sulfur Bacteria: ☐ ☒ ☐ ☐			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																									
SAMPLING TEAM <u>MIKE KING Nathan Murphy</u>			SIGNATURE: 			DATE: <u>7/16/18</u>																																						

Waterbody: Sigbee River

Date: 7/16/88

County: WILTON

Storet Number: G 3NWO154

Analyst: MIKE KING

Signature:

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

<i>(pages for additional taxa names)</i>																																	
<i>SBI02D 78612</i>	Meter Mark									Specimen collected (check)	<i>BMACRO ID W994</i>	Meter Mark									Specimen collected (check)												
HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90		90-100	HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80		80-90	90-100										
<i>Alternanthera philoxeroides</i>																							<i>Micranthemum glomeratum</i>										
<i>Bacopa caroliniana</i>																							<i>Micranthemum umbrosum</i>										
<i>Bacopa monnieri</i>																							<i>Myriophyllum aquaticum</i>										
<i>Bidens mitis</i>																							<i>Najas guadelupensis</i>										
<i>Boehmeria cylindrica</i>																							<i>Nuphar</i>	X	X	X				X	X	X	X
<i>Centella asiatica</i>																							<i>Orontium aquaticum</i>										
<i>Cephalanthus occidentalis</i>																							<i>Panicum hemitomon</i>										
<i>Ceratophyllum demersum</i>																							<i>Panicum repens</i>										
<i>Chara</i>																							<i>Panicum rigidulum</i>										
<i>Cicuta maculata</i>																							<i>Pistia stratioides</i>										
<i>Cladium jamaicense</i>																							<i>Polygonum glabra</i>										
<i>Colocasia esculenta</i>																							<i>Polygonum hydropiperoides</i>										
<i>Crinum americanum</i>						X	X		/														<i>Polygonum punctatum</i>										
<i>Diodia virginiana</i>																							<i>Pontedaria cordata</i>										
<i>Eichhornia crassipes</i>																							<i>Potamogeton illinoensis</i>										
<i>Eleocharis (wispy viviparous)</i>																							<i>Sacciolepis striata</i>										
<i>Fontinalis</i>																							<i>Sagittaria kurziana</i>										
<i>Hydrilla verticillata</i>																							<i>Sagittaria lancifolia</i>										
<i>Hydrocotyle</i>																							<i>Sagittaria latifolia</i>										
<i>Hygrophila polysperma</i>																							<i>Salix caroliniana</i>										
<i>Hymenocallis</i>																							<i>Salvinia minima</i>										
<i>Itea virginica</i>																							<i>Samolus parviflora</i>										