



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF

Data Qualified?

Yes / No

June 2016

STORET Station Name: G2TLHR0019 Aucilla River Date: 10/19/16
(mm/dd/yyyy)

STORET Station ID: G2TLHR0019 WBID: 3310 Latitude: _____
(Decimal Degrees)

County: Taylor RQ: 2016-10-12-69 ORG ID: 8034 Longitude: _____
(Decimal Degrees)

Receiving Body of Water: Gulf of Mexico Field ID: G2TLHR0019

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
M. A. Eckles					X	X			
J. M. Woods						X	X	X	

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Equipment ID		

Collection Method	
☒ Wading	☐ Via Boat
☐ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☐ Electric Motor
	☐ Gasoline Motor

Water Level: Dry / Low / <u>Normal</u> / High / Flooded						Matrix: Fresh / Marine / DI											
Meter ID# <u>YSI 600XIM #9</u>						Photos: Yes / <u>No</u>						Tide Falling: Yes / No / <u>NA</u>					
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)							
EST	14:20	0.3	0.6	4.4	51	7.1	0.12	0.65	246	22.7							
CEN																	

Biological Samples Collected: None HA SCI LVS RPS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / ☐ W-NO2NO3 / ☐ W-TKN / ☐ W-TOC / ☐ W-S-A-TP	☒ Ice ☒ H2SO4		07/17	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO2			☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm 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			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Place Preservative Sticker(s) Here
(If Available)

Notes:	Place Label Here (If Available)

Signature: _____ Date: 10/19/16

Field Parameters Entered into LIMS: can 11/10/16 Field Parameters QC in LIMS: ME 11/10/16
(Initials/Date) (Initials/Date)

Date Migrated to STORET: _____ Field Sheets Scanned/Saved: ME 11/30/17
(Initials/Date) (Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

ite: <u>Aucilla River</u>					County: <u>Jefferson</u>		Date: <u>10/19/16</u>		Investigators: <u>Eckles / Woods</u>													
Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	STORET Station Number: <u>61TLHR0017</u>												
0	1				60	1				Secchi depth <u>0.0</u> Estimated? <u>1</u> # points ranked 4-6 <u>0</u> total points assessed <u>0</u> % points ranked 4-6 <u>0</u>												
	2					2																
	3					3																
	4					4																
	5					5																
	6					6																
	7					7																
	8					8																
	9					9																
10	1				70	1				Check accompanying data collected at same site/date. Algal mat sample <u>0</u> Linear Veg Survey <u>0</u> Habitat Assessment <u>0</u> SCI/Biorecon <u>0</u> Water sample <u>0</u> RQ- <u>2016-10-17-69</u>												
	2					2																
	3					3																
	4					4																
	5					5																
	6					6																
	7					7																
	8					8																
	9					9																
20	1				80	1				<table border="1"> <thead> <tr> <th colspan="2">Algal Thickness Rank</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>rough, no algae, slimy, algae up to 1mm</td> </tr> <tr> <td>3</td> <td>>1mm - 6mm</td> </tr> <tr> <td>4</td> <td>>6mm - 20mm</td> </tr> <tr> <td>5</td> <td>>20mm - 10 cm</td> </tr> <tr> <td>6</td> <td>>10 cm</td> </tr> </tbody> </table>	Algal Thickness Rank		N	rough, no algae, slimy, algae up to 1mm	3	>1mm - 6mm	4	>6mm - 20mm	5	>20mm - 10 cm	6	>10 cm
	Algal Thickness Rank																					
	N	rough, no algae, slimy, algae up to 1mm																				
	3	>1mm - 6mm																				
	4	>6mm - 20mm																				
	5	>20mm - 10 cm																				
	6	>10 cm																				
	2					2																
	3					3																
4				4																		
5				5																		
6				6																		
7				7																		
8				8																		
9				9																		
30	1				90	1				Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank. Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6. Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.												
	2					2																
	3					3																
	4					4																
	5					5																
	6					6																
	7					7																
	8					8																
	9					9																
40	1				100	1																
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	4					4																
	5					5																
	6					6																
	7					7																
	8					8																
	9					9																
50	1					1																
	2					2																
	3					3																
	4					4																
	5					5																
	6					6																
	7					7																
	8					8																
	9					9																

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID _____ LATITUDE _____
 COUNTY Jefferson STORET # G2TLHR0019 LONGITUDE _____
 DATE 10/19/16 TIME 14:40 SAMPLING AGENCY 8034
 SITE NAME Aucilla River
 FIELD ID/NAME G2TLHR0019 RECEIVING BODY OF WATER Gulf of Mexico

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>60</u> Silviculture <u>30</u> Field/Pasture <u>5</u> Agricultural <u>5</u> Residential <u>5</u> Commercial <u>5</u> Industry <u>5</u> Other (Specify) <u>5</u>						Landscape Development Intensity Index (LDI) <u> </u>	
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 <u>15</u> m wide	
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>218</u> Right Bank: <u>218</u>				Hydrologic Modification Score (per FT 3101) <u> </u>		<u>6.2</u> m/s <u>6.2</u> m/s <u>6.2</u> m/s	
High Water Mark: <u>1.0</u> + <u>0.6</u> = <u>1.6</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		<u>0.3</u> m deep <u>0.6</u> m deep <u>0.3</u> 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): <u> </u>		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 ☐ LCI ☐ BioRecon		WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u>0.6</u> Mid: <u>0.3</u> <u>22.7</u> <u>7.1</u> <u>4.4</u> <u>51</u> <u>246</u> <u>6.12</u> ☒ VOB Bottom: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Meter ID: <u>QSE 400 x 1m #9</u> <u>0.6</u>			
Woody Debris (Snags) <u>6.9</u> Undercut Banks / Roots <u>6.87</u> Leaf Packs or Mat <u> </u> Aquatic Vegetation <u> </u> Rock or Shell Rubble <u>26.67</u> Sand <u> </u> Mud / Muck / Silt <u> </u> Other <u> </u> Other <u> </u>		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u> </u> Exp: <u> </u> Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: <u> </u> Exp: <u> </u>		Water Surface Oils Normal ☐ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐	
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☒ ☐ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) <u> </u> AMBIENT FIELD CONDITIONS / NOTES: ☐ The antecedent hydrologic conditions have been met to my best knowledge.			

SAMPLING TEAM Team Aursene (Eckles / Woods) **SIGNATURE:** **DATE:** 10/19/16

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

SAMPLING AGENCY: 8034		STORET STATION NUMBER: 62TLHR0019	DATE (MM/DD/YY): 10/19/16	RECEIVING BODY OF WATER: Gulf of Mexico
REMARKS:	COUNTY: Jefferson	LOCATION: Auxilla River	FIELD ID/NAME: 62TLHR0019	

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 14	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 14	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 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 14	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 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 17 ----- Primary Score 59	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 12 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 20	20 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 10 Left Bank 10	10 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 10 Left Bank 10	10 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 10 Left Bank 10 ----- Secondary Score 80	10 9	8 7 6	5 4	3 2 1

139 TOTAL SCORE

Date: 10/19/16	Analyst: M.A. Eckles	Signature: 
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Left Bank

Downstream

1R 1R

15

2R 1R

1R

2R

15

Rock

Rock

$$\begin{aligned} \cancel{14} - 5 &= 9 \\ S - 14 &= 0.9 \\ R - 13 &= 6.87^{10} \\ 15 - 400 &= \cancel{2.6} 2667 \end{aligned}$$

Entire River Covered in Rock
Hard to quantify & basically
everything not sun or root
is Rock Can See ~ 2 m
out on each side