



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
PHYSICAL-CHEMICAL CHARACTERIZATION FIELD FORM

August 2016

STORET Station Name: Auc@ 7BRIDGE Survey/Project: Ref Stream Sample
Date: 8/30/16 Time: 1415
(mm/dd/yyyy) (EST) CST
STORET Station ID: 22040130 WBID: _____ Latitude: 30.43422
(Decimal Degrees)
County: Madison RQ: 2016-08-22-80 Agency ID: FDEP Longitude: -83.72214
(Decimal Degrees)
Receiving Body of Water: Apalachee Bay Field ID: Auc@7Bridg

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
<u>J Jackson (sci)</u> <u>S Panek</u> <u>A O'Neal (CH2O)</u>					☒	☒	☒	☒	☒	☒ 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 / Normal / High / Flooded Matrix: Fresh / Marine / DI
Meter ID# YSI 1483 Photos: Yes / No Tide Falling: Yes / No / NA

Sample Depth (m)	pH	Temp. (C)	DO (mg/L)	DO (%SAT)	Sp COND (µmhos/cm)	Salinity (ppt)	Secchi Disk (m)	Total Depth (m)	Data Qualified (Y/N)
Top	<u>7.49</u>	<u>23.4</u>	<u>5.76</u>	<u>67.2</u>	<u>357.1</u>		<u>VOB</u>	<u>.3</u>	<u>Y</u>
Mid									
Bottom									<u>(spondonly)</u>

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	<u>6209120</u>	<u>7/27/17</u>	☒ <2
Metals	☐ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO3	<u>6209120</u>	<u>7/27/17</u>	☒ <2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)		
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	☒ SCI ☐ Other: <u>3 jugs</u>	☒ 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			
Other					

Notes/Observations: (weather / watershed alterations / erosion / odors)
NO RPS OR LVS (<2m²)

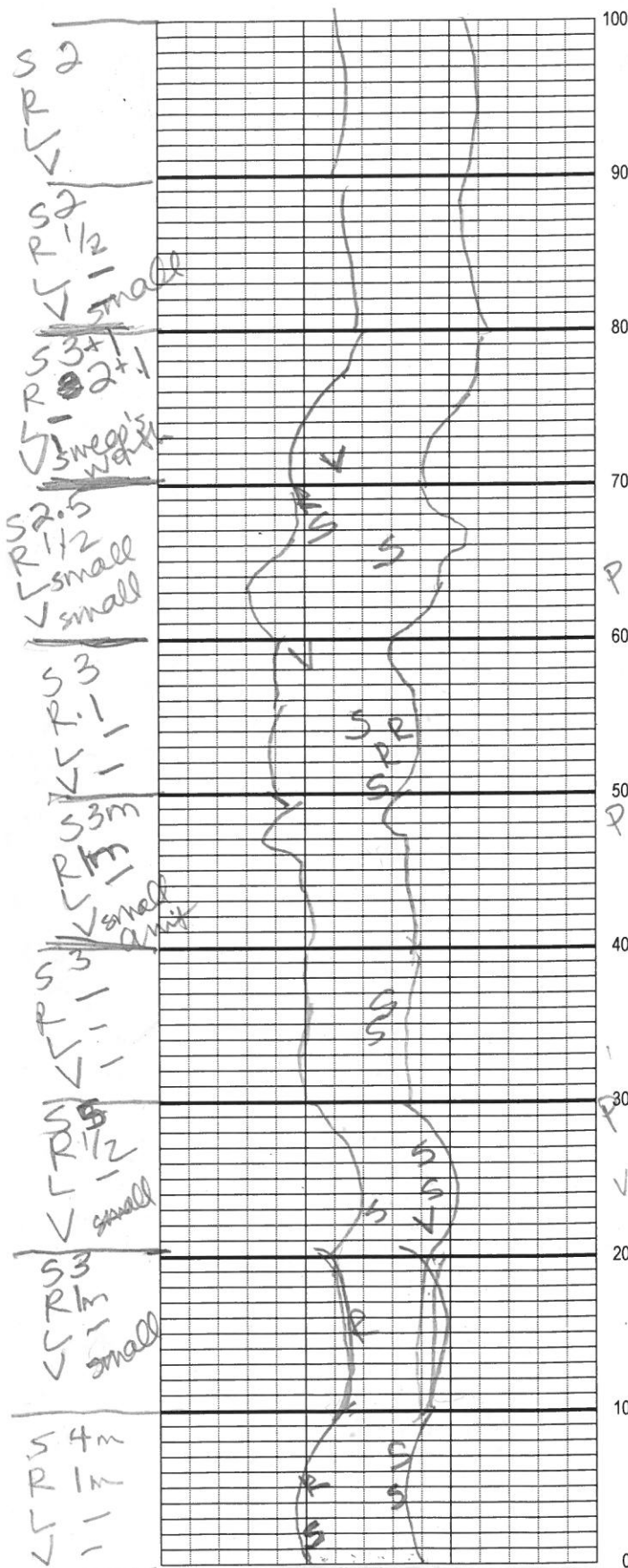
Location: Aucilla River
Lat: 30.43422 Long: -83.72214
Date: 8/30/16 Time: 1415 (EST or CT)
Initials: AO

AUC@7BRIDG
Field ID ↑
STORET ↓
22040130

Print Name: Ashley O'Neal Signature: Ashley O'Neal Date: 8/30/16

Field Parameters Entered into SBIO: _____ (Initials/Date) Field Parameters QC in SBIO: _____ (Initials/Date)
Date Migrated to STORET: _____ (Initials/Date) Field Sheets Scanned/Saved: _____ (Initials/Date)

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



S $\frac{31.5 m^2}{400 m^2}$
R $\frac{8.5 m^2}{400 m^2}$
L
V

10.1
(2-7-6)

Station Name: Auc@ 7 BRIDG
Station ID: STORET 22040130
Waterbody: Aucilla River
Latitude: 30.43422 Longitude: -83.72241
Sampler: ONEAL
Date: 8/30/16 Hydrologic Modification Score: 1-2

Major Habitats	Code	# Squares	% Cover	# Sweeps
Snags	<u>S</u>	<u>8</u>	<u>8</u>	<u>11</u>
Roots	<u>R</u>	<u>2.1</u>	<u>2.1</u>	<u>11</u>
Leaves	<u>L</u>	<u>-</u>	<u>-</u>	<u>1</u>
Aquatic Vegetation	<u>V</u>	<u>-</u>	<u>-</u>	<u>1</u>
Rock	<u>RK</u>	<u>-</u>	<u>-</u>	<u>-</u>
Minor Habitats				
Sand				<u>11</u>
Other				
Total			<u>10.1 (+ minimal L & V)</u>	

Substrate Smothering (check all that apply)				
	None	Slight	Moderate	Severe
Sand	☐	☐	☐	☐
Silt	☐	☐	☒	☐
Algae	☐	☐	☐	☐

Canopy Cover (check box)			
Open (<10%)	Lightly Shaded (11-45%)	Moderately Shaded (46-80%)	Heavily Shaded (>80%)
☐	☐	☐	☒

Average width: 4 m Average depth: 0.3 m
Total # pools: 4 Expected range: 2-4
Velocity measured at: 90 m mark
Meter reading & water chemistry taken at 100 m
Note areas of bank instability / riparian disturbance. -none

Notes/Plants Observed::
0-4m width.
Hydrilla in water, small
40-5m width
Acer sacchar.
Itea
Ulmus
Osmunda
P=Pool
70-3.5
4
100 4.5

Left bank Downstream Right bank
0.11 m/s 0.16 m/s 0.16 m/s
0.3 m deep 0.3 m deep 0.1 m deep
Length represents 100 m of stream (not linear meters).
(Horizontal scale is 2x vertical scale).

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

SAMPLING AGENCY: <u>FDEP</u>		STORET STATION NUMBER: <u>22040130</u>	DATE (MM/DD/YY): <u>8/30/16</u>	RECEIVING BODY OF WATER: <u>Apalachee Bay</u>
REMARKS: <u>rain@end of sample</u>	COUNTY: <u>Madison</u>	LOCATION: <u>Aucilla River @ 7 Bridges</u>	FIELD ID/NAME: <u>AVC@7BRIDG</u>	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>9</u>	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock) 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 <u>9</u> 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered. 5 4 3 2 1
Substrate Availability <u>8</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 <u>9</u> 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>13</u>	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 <u>13</u> 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>42</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, <u>silt</u> , 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 Artificial Channelization <u>20</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. <u>20</u> 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank <u>10</u> Left Bank <u>10</u>	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. + <u>10</u> 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>80</u>	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. <u>10</u> 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

122

TOTAL SCORE

Date: <u>8/30/16</u>	Analyst: <u>O'Neal, A.</u>	Signature: <u>Ashley O'Neal</u>
-------------------------	-------------------------------	------------------------------------

