



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Quincy Creek 300m DS of Ralph Strong

Date: 5/7/2019
(mm/dd/yyyy)

WIN/ Field ID: G1WA0080

WBID: 1303A

Latitude: 30.5861

(Decimal Degrees)

County: Gadsden

ORG ID: 21FLWQA

Longitude: -84.5478

(Decimal Degrees)

Receiving Body of Water: Little River

RQ- 2019-03-25-18

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Amil Wood-Mcbrath							X	X		
Blake Spencer						X		X		
Jason Storr									X	X

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>meter stick</u>		
Equipment ID		

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

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

Meter ID# Pro 155 18104543 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 (µmhos/cm)	Temp. (C°)
EST	10:50	0.4	0.2	VOB	8.38	92.6	6.89	0.04	89.3	20.3
CEN										

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

SBIO ID Numbers: SBIO-ID: 79600 HA-ID: 15900 RPS-ID: 9332 Macrophyte-ID: 22m2 LIMS#: 2084287

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	<u>SAB344070</u>	<u>12/10/19</u>	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	<u>NAB344050</u>	<u>12/10/19</u>	☒ <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-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☒ MI-FW-QLDC	☒ Formalin			
Periphyton	☐ ALGAE-ID <u>NO</u>	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☒ Ice <u>Amil</u>			
Pesticides	☐ W-PSNP-TQ ☒ W-CT-CL-R ☐ W-E8321-DI ☒ W-PCL-SQ-R ☒ WE8321-MS ☐ W-CARB-AA	☒ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes: New site, 1st visit

WIN ID / FILED ID → G1WA0080

Location: Quincy Creek
300 m DS of Ralph Strong

Signature: [Signature] Date: 5/7/19

LIMS EVENT ID: WAS-SRCT-2019-05-07-02

WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: BAK 5/16/19
(Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: Amil 6/14/19
(Initials/Date)

Scan/Save Field Sheets
(Initials/Date)

Migrate Data to WIN:
(Initials/Date)

Verify Data In WIN:
(Initials/Date)

Entered by: ~~882~~ 5/16/19
QC'd by: AUM 6/14/19

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

HA: 15900

SAMPLING AGENCY: Florida Department of Environmental Protection		STORET STATION NUMBER: GIWA0080 ✓	DATE (MM/DD/YY): 5/7/19 ✓	RECEIVING BODY OF WATER: Little River
REMARKS: SRIO 79600 ✓	COUNTY: Gadsden	LOCATION: Quincy Creek 300m downstream of Bluff Highway		FIELD ID/NAME: GIWA0080

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Snag Leaf Aquatic Vegetation Roots Rock Substrate Diversity 8 ✓	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 9 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 6 ✓ 7 %	Major productive habitat present at site (>30% 27.2% 25.8% 24.4% 26.6%) 20 19 18 17 16	Major productive habitat, by aerial extent (21.6% 20.2% 18.8% 17.4% 16%) 15 14 13 12 11	6% to 15% major productive habitat (15% 13% 11% 9% 6%) 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 15 ✓ 0.25 m/s	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 11 ✓ ----- Primary Score 40 ✓	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 Artificial Channelization 20 ✓	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. May have spoil banks. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. May have spoil banks. 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 10 ✓ Left Bank 10 ✓ If Banks are PipeClay, BedRock or Concrete at Bank full: Optimal	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. (+,+,+) 10 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 10 ✓ Left Bank 10 ✓	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6 (18m 15m 12m)	Width of vegetation 6 to 12 m. human activities close to system 5 4 (9m)	Less than 6 m of buffer zone due to intensive human activities 3 2 1 (6-5m) (4-3m) (<2m)
Riparian Zone Vegetation Quality Right Bank 7 ✓ Left Bank 6 ✓ ----- Secondary Score 73 ✓	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. 10 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

113 ✓ TOTAL SCORE

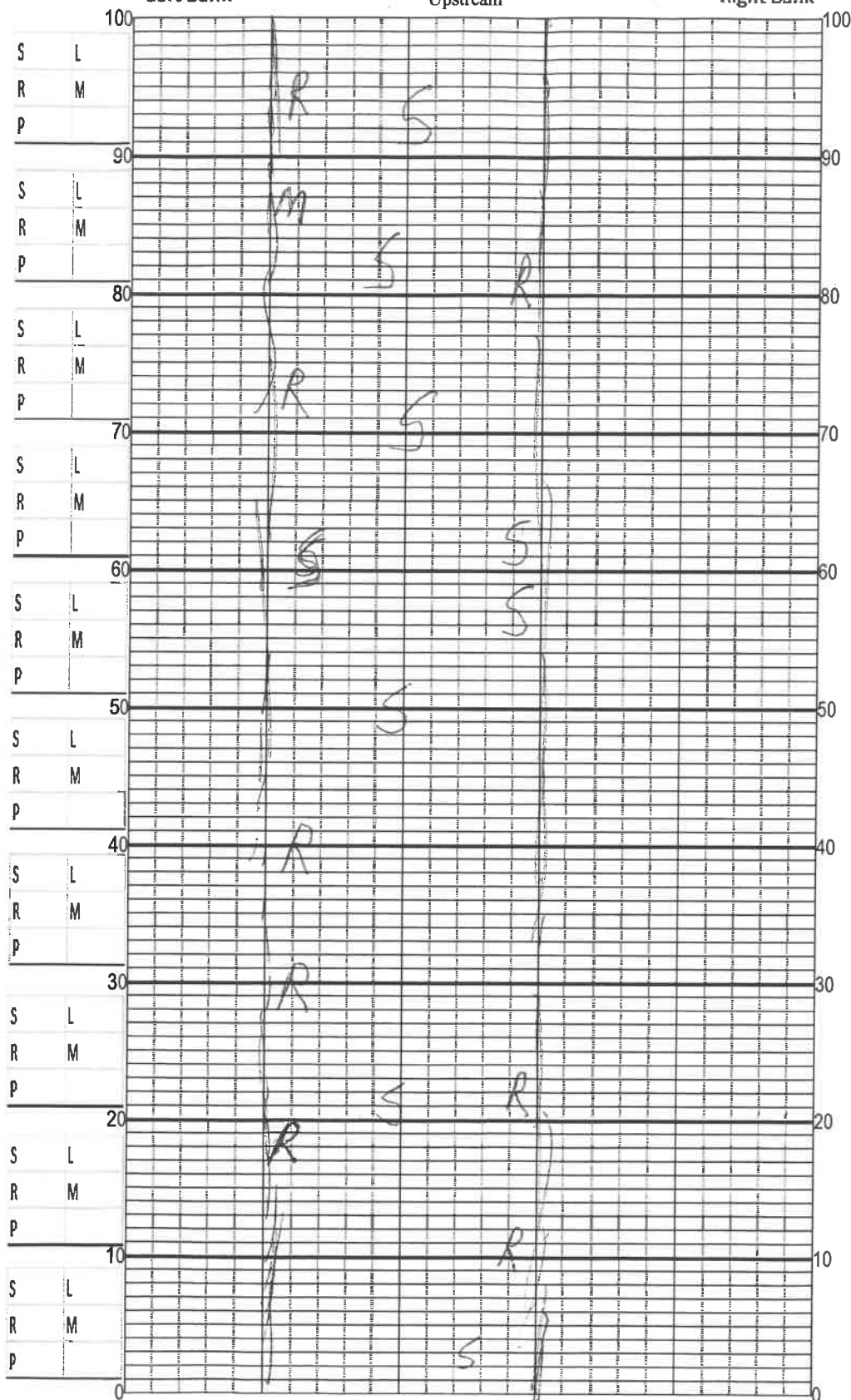
Date: 5/7/19 ✓	Analyst: Blake Spencer ✓	Signature: 
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Left Bank

Upstream

Right Bank



Meter Mark	Depth (m)	Width (m)	Velocity Measurement (Sec)
Avg.			

Length of grid represents 100 m of stream (not linear meters). (Horizontal scale is double vertical scale, draw proportionately).

Expected Number of Pools

$$\left(\frac{100}{12 * W} \right) * 1 =$$

$$\left(\frac{100}{12 * W} \right) * 2 =$$

GIWA0080
Quincy Creek 300m
DS of Ralph Strong

Location:

Date:

5/7/2019

Sampler:

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	
Substrates: Code key, draw proportionate habitat abundance. %	
☐ S	Snags <u>3.5</u>
☐ R	Roots/undercut banks <u>3.5</u>
☐ L	Leaf Packs (or mats) _____
☐ M	Aquatic Macrophytes _____
☐ Rc	Rock _____
☐	_____
☐ P	Pools total # observed = _____ # range expected = _____
Average width <u>4</u> m	
Average depth <u>0.4</u> m	
Velocity measured at <u>80</u> meter mark.	
Velocity <u>0.25</u> m/s	
WQ & chemistry taken at <u>80</u> meter mark.	
Habitat Smothering: Note areas (on map) where sand or silt is smothering substrates, limiting habitability.	
Bank Stability: Note areas (on map) with unstable, eroding banks.	
Riparian Buffer Width: Note areas (on map) where natural vegetation is altered or eliminated.	

Notes/Plants Observed:

2m² = 13.2 Sweeps

# of Sweeps	Conversion	m ²	%
Snag	÷ 8	m ²	
Root	÷ 8	m ²	
Leaf	÷ 8	m ²	
Macrophyte	÷ 8	m ²	
Rock	÷ 8	m ²	
Total Available Habitat		m ²	
Total Area		m ²	
Total Unavailable Habitat		m ²	

Entered by: RAB 5/15/19
QC'd by: ANM 6/14/19

SBIO: 79600 RPS: 93321

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Quincy Creek 300m downstream of Ralph Storg					County: Gadsden		Date: 5/7/19		Investigators: Blake Spencer		
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: 51WA0080	
0	1	N	N		60	1	N	N		Secchi depth 108 Estimated? 10 # points ranked 4-6 0 total points assessed 99 % points ranked 4-6 0 (Exclude X's) Check accompanying data collected at same site/date. Algal mat sample Linear Veg Survey Habitat Assessment SCI/Biorecon Water sample RQ-2019-03-25-16	
	2					2					
	3					3					
	4					4					
	5					5					
	6					6					
	7					7					
	8					8					
	9					9					
10	1				70	1				(3) 6mm (4) 20mm (5) 10cm (6)	
	2					2					
	3					3					
	4					4					
	5					5					
	6					6					
	7					7					
	8					8					
	9					9					
20	1				80	1				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 (> 3 considered smothered)	
	2					2					
	3					3					
	4					4					
	5					5					
	6					6					
	7					7					
	8					8					
	9					9					
30	1				90	1				(5) 10cm (6)	
	2					2					
	3					3					
	4					4					
	5					5					
	6					6					
	7					7					
	8					8					
	9					9					
40	1				100	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					
50	1					1					
	2					2					
	3					3					
	4					4					
	5					5					
	6					6					
	7					7					
	8					8					
	9					9					

5810: 79600

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Quincy Creek 300m downstream of Ralph Strong Rd. Date: 5/7/19 County: Gadsden Storet Number: G1WAP00

Analyst: Blake Spencer

Signature: [Signature]

Comments: SMP Sampling 6.2m²

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.

HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
Alternanthera philoxeroides												Myriophyllum heterophyllum											
Bacopa caroliniana												Najas guadelupensis											
Bacopa monnieri												Nuphar luteum											
Bidens mitis												Orontium aquaticum											
Boehmeria cylindrica												Panicum hemitomon											
Centella asiatica												Panicum repens											
Ceratophyllum demersum												Panicum rigidulum											
Chara												Peltandra virginica											
Cicuta maculata												Pistia stratioides											
Cladium jamaicense												Polygonum glabra									X		
Colocasia esculenta												Polygonum hydropiperoides											
Commelina diffusa												Polygonum punctatum											
Commelina virginica												Pontedaria cordata											
Crinum americanum												Potamogeton illinoensis											
Diodia virginiana												Rhynchospora inundata											
Eichhornia crassipes												Rosa palustris											
Eleocharis (wispy viviparous)												Ruellia simplex											
Hydrilla verticillata												Rumex verticillatus											
Hydrocotyle												Sacciolepis striata											
Hygrophila polysperma												Sagittaria kurziana											
Hymenocallis												Sagittaria lancifolia											
Lachnanthes caroliniana												Sagittaria latifolia											
Landoltia punctata												Salvinia minima											
Lemna												Samolus parviflora											
Limnophila sessiflora												Saururus cernuus											
Ludwigia leptocarpa												Scirpus (schenoplectus) californicus											
Ludwigia palustris												Sparganium americanum											
Ludwigia peruviana												Typha											
Ludwigia repens												Vallisneria americana											
Luziola fluitans												Zizania aquatica											
Micranthemum glomeratum																							
Micranthemum umbrosum																							
Mikania scandens																							
Myriophyllum aquaticum																							
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section												Notes:											
0-5% Macrophyte Coverage																							
>5 and ≤10% Macrophyte Coverage																							
>10 and ≤25% Macrophyte Coverage																							
>25 and ≤50% Macrophyte Coverage																							
> 50% Macrophyte Coverage																							

X < 2m²

Occ'd by P. W. G. 11/11/19

[Signature]

Entered by: 6/14/19

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

SAMPLE ID 79600 ORG ID 21FLW3A LATITUDE 30.5861
 COUNTY Caldwell STORET # GLWA0080 LONGITUDE -84.5479
 DATE 5/2/19 TIME _____ SAMPLING AGENCY FLBP
 SITE NAME Quincy Creek 300m downstream of Ralph Strong Rd.
 FIELD ID/NAME GLWA0080 RECEIVING BODY OF WATER Little River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>44%</u> Silviculture <u>22.5%</u> Field/Pasture <u>8%</u> Agricultural <u>4%</u> Residential <u>13%</u> Commercial <u>2%</u> Industry <u>5.5%</u> ^{water} Other (Specify) <u><1%</u>								Landscape Development Intensity Index (LDI) <u>2.7</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>5</u> m wide <u>0.25</u> m/s <u>0.4</u> m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>7/8</u> Right Bank: <u>7/8</u>				Hydrologic Modification Score (per FT 3101) <u> </u>				
High Water Mark: <u>0.8</u> + <u>0.4</u> = <u>1.0</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				
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 ☐ LCI ☐ BioRecon <table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>3.5</u></td> <td><u>11</u></td> <td><u> </u></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>3.5</u></td> <td><u>11</u></td> <td><u> </u></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u> </u></td> <td><u>1</u></td> <td><u> </u></td> </tr> <tr> <td>Aquatic Vegetation</td> <td><u> </u></td> <td><u>1</u></td> <td><u> </u></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Sand.....</td> <td><u>530</u></td> <td><u>11</u></td> <td><u> </u></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Other</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Other</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>3.5</u>	<u>11</u>	<u> </u>	Undercut Banks / Roots	<u>3.5</u>	<u>11</u>	<u> </u>	Leaf Packs or Mat	<u> </u>	<u>1</u>	<u> </u>	Aquatic Vegetation	<u> </u>	<u>1</u>	<u> </u>	Rock or Shell Rubble..	<u> </u>	<u> </u>	<u> </u>	Sand.....	<u>530</u>	<u>11</u>	<u> </u>	Mud / Muck / Silt	<u> </u>	<u> </u>	<u> </u>	Other	<u> </u>	<u> </u>	<u> </u>	Other	<u> </u>	<u> </u>	<u> </u>	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><u>0.2</u></td> <td><u>20.3</u></td> <td><u>6.89</u></td> <td><u>9.38</u></td> <td><u>92.6</u></td> <td><u>89.3</u></td> <td><u>0.04</u></td> <td><u>VOB</u></td> </tr> <tr> <td>Mid:</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u>VOB</u></td> </tr> <tr> <td>Bottom:</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> </tbody> </table> Meter ID: <u>Pro 155 18J104543</u> TOTAL DEPTH <u>0.4</u>							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.2</u>	<u>20.3</u>	<u>6.89</u>	<u>9.38</u>	<u>92.6</u>	<u>89.3</u>	<u>0.04</u>	<u>VOB</u>	Mid:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>VOB</u>	Bottom:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
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Other	<u> </u>	<u> </u>	<u> </u>																																																																																	
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Top:	<u>0.2</u>	<u>20.3</u>	<u>6.89</u>	<u>9.38</u>	<u>92.6</u>	<u>89.3</u>	<u>0.04</u>	<u>VOB</u>																																																																												
Mid:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>VOB</u>																																																																												
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ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☐	☒	☐	☐	Fish:	☒	☐	☐	☐	Aquatic Plants:	☐	☒	☐	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐																																																					
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Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>See Field</u> Exp: <u>Sheet</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____																																																																														
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			CLARITY Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																																																																	
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																																				
SAMPLING TEAM <u>Blake Spencer, Antwood-McGath, Jason Steers</u>				SIGNATURE: <u> </u>		DATE: <u>6/14/19</u>																																																																														

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there is qualified data on this page.

Meter ID: 18J104543

RQ:

2019-03-25-19
2019-03-04-30

Project:

Quincy Creek SCI

Notes: (1) Always wait for meter to stabilize before recording any readings.

(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).

(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Jason Storm	5/7/19	745	22.3	8.7	8.73	99.9		1.036	⓪ / F	⓪ / F
ICV	Jason Storm	5/7/19	750	21.9	8.7	8.75	99.7			⓪ / F	⓪ / F
CCV	Blake Spencer	5/7/19	1527	23.0	8.578	8.61	100.5	—	—	⓪ / F	⓪ / F
CCV										P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	Jason Storm	5/7/19	735	180621C	07/2019	1000	1000	⓪ / F	⓪ / F
ICV	Jason Storm	5/7/19	740	180621C	07/2019	1000	1000	⓪ / F	⓪ / F
CCV	Jason Storm	5/7/19	741	2808884	07/2020	100	100.7	⓪ / F	⓪ / F
CCV	Blake Spencer	5/7/19	1532	2808884	07/2020	100	100.7	⓪ / F	⓪ / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Jason Storm	5/7/19	727	180403C	10/2019	7.0	7.00	-21.8	⓪ / F	⓪ / F
Calibr.	Jason Storm	5/7/19	728	180621D	7/2019	4.0	4.00	153.4	⓪ / F	⓪ / F
Calibr.	Jason Storm	5/7/19	729	180621F	1/2020	10.0	10.01	-191.5	⓪ / F	L / F
ICV	Jason Storm	5/7/19	730	180621F	1/2020	10.0	10.03	-191.6	⓪ / F	⓪ / F
CCV	Blake Spencer	5/7/19	1538	190405B	10/2020	4.0	4.15	144.1	⓪ / F	⓪ / F
CCV									P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air	Jason Storm	5/7/2019	725	0.0	0.272	⓪ / F	L / F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Customer: WAS-SECT
Project ID: SMP

Curtis Misson

Field Report Prepared By:

Collected By: Blake Spencer, Jason Skors, Avril Wood & Margaret H
Sampling Agency:

Avni Wood-1/6/2021

[illegible]

Group: B Bottle Type: MI-FW-QLDC Pj-2L # of Bottles: 2 Preservative: Formalin Enter Number of Bottles Sent to Lab 3

Cooler Packing Worksheet for Request: RQ-2019-03-25-18

SCI #6

Ship Cooler On: 3/21/2019

Customer/Project: WAS-SECT/SMP

Assigned To: SHAIK_A

Requester: Curtis Musson

Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Nutrients, Metals, Tracers, Q-PSNP-TQ

Group B: SCI, Algae_ID

Packing Notes:

No FedEx Labels

No Trash Bag

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00072522

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 1 Preservation: ICE

Lot # 00073247

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-250ML-WO-THI

Qty: 1 Preservation: ICE

Lot # 6A207N

Description: 250 ml Sterilized no tablet

Analysis
ECOLI-18QT

Description
Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Container ID: BG-500ML

Qty: 1 Preservation: ICE

Lot # 5072340

Description: Brown Glass Bottle 500ML

Affix BLUE dot to container.

Analysis
W-E8321-DI
W-E8321-MS

Description
Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 5073297

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis
W-IC
CPMS

Description
Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Container ID: P-500ML

Qty: 1 Preservation: ICE And H2SO4

Lot # 5073297

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis
W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

Description
Ammonia in aqueous matrices as mg N/L
Nitrite/Nitrate in aqueous matrices as mg N/L
Total Phosphorus in aqueous matrices as mg P/L
Total Kjeldahl Nitrogen in aqueous matrices
Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML

Qty: 1 Preservation: FILTER-ICE

Lot # 5072954

Description: Plastic Bottle 125 mL

Analysis
W-PO4-F

Description
Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L