



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes / No

DO

WIN Station Name: Swamp Creek upstream of Railroad

Date: 6/7/2018

(mm/dd/yyyy)

WIN/ Field ID: G1WA0052

WBID: 427

Latitude: 30.663

County: Gadsden

ORG ID: 21FLWQA

Longitude: -84.448

(Decimal Degrees)

Receiving Body of Water: Attapulugus Creek

RQ-2018- 06-04-36

(Decimal Degrees)

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Curtis Musson					X				☒ Sample Container	☐ Van Dorn	☐ Pole	
Jason Storres				X		X	X	X	☐ Carboy	☐ Syringe		
									☐ Dipper	☐ Other		
									Depth Measured with <u>Secchi / Dipnet CAN</u>			
									Equipment ID <u>Meter STICK</u>			
									Collection Method			
									☒ Wading	☐ Canoe/Kayak		
									☐ From Shore	☐ Electric Motor		
									☐ Other	☐ Gasoline Motor		
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded				Meter ID# BIO #2				Matrix: <u>Fresh</u> / Marine / DI				
Photos: Yes / <u>No</u>				Flow: No Flow / Intestinal / <u>Flowing</u> / NA				Tide: Rising/ Falling/ Slack/ <u>NA</u>				
Tide Times: High — Low —												
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (umhos/cm)	Temp. (C°)		
<u>EST</u>	<u>8:10</u>	<u>0.7</u>	<u>0.3</u>	<u>0.6</u>	<u>8.20</u>	<u>94.9</u>	<u>7.04</u>	<u>0.04</u>	<u>90</u>	<u>22.67</u>		
CEN	—	—	—	—	—	—	—	—	—	—		
Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>RPS</u> <u>Algae ID</u> <u>LVS</u> <u>LVI</u> Other:												
SBIO ID Numbers: SBIO-ID: <u>78433</u> HA-ID: <u>15185</u> RPS-ID: <u>9032</u> Macrophyte-ID: LIMS#: <u>1998790</u>												
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>SA 7341020</u>	<u>12/07/18</u>	☒ <2				
Metals	☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3	<u>NA 7341010</u>	<u>12/7/18</u>	☒ <2				
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter				☒ Ice	<u>10827054</u>						
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-E8321-DI ☐ W-E8321-MS				☐ Ice							
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI				☐ Ice							
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Other							

Notes:
Kit C
E.coli
SCI,HA
RPS/LVS

Swamp Creek
upstream of
Railroad

WIN ID / FILED ID



G1WA0052

Signature: [Signature]

Date: 6/7/2018

Enter Field Parameters, Verify Station ID In LIMS DMT: J Storres 6/8/18

QC Station ID, Field Parameters In LIMS DMT: SA 6/14/18

Scan/Save Field Sheets Cm 6/22/18

(Initials/Date)

Migrate Data to WIN: [Signature]

(Initials/Date)

Verify Data In WIN: [Signature]

(Initials/Date)

QC'd by: ~~8/8~~ 6/14/18

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

SBIO: 78433 ~~FM: 15/15~~

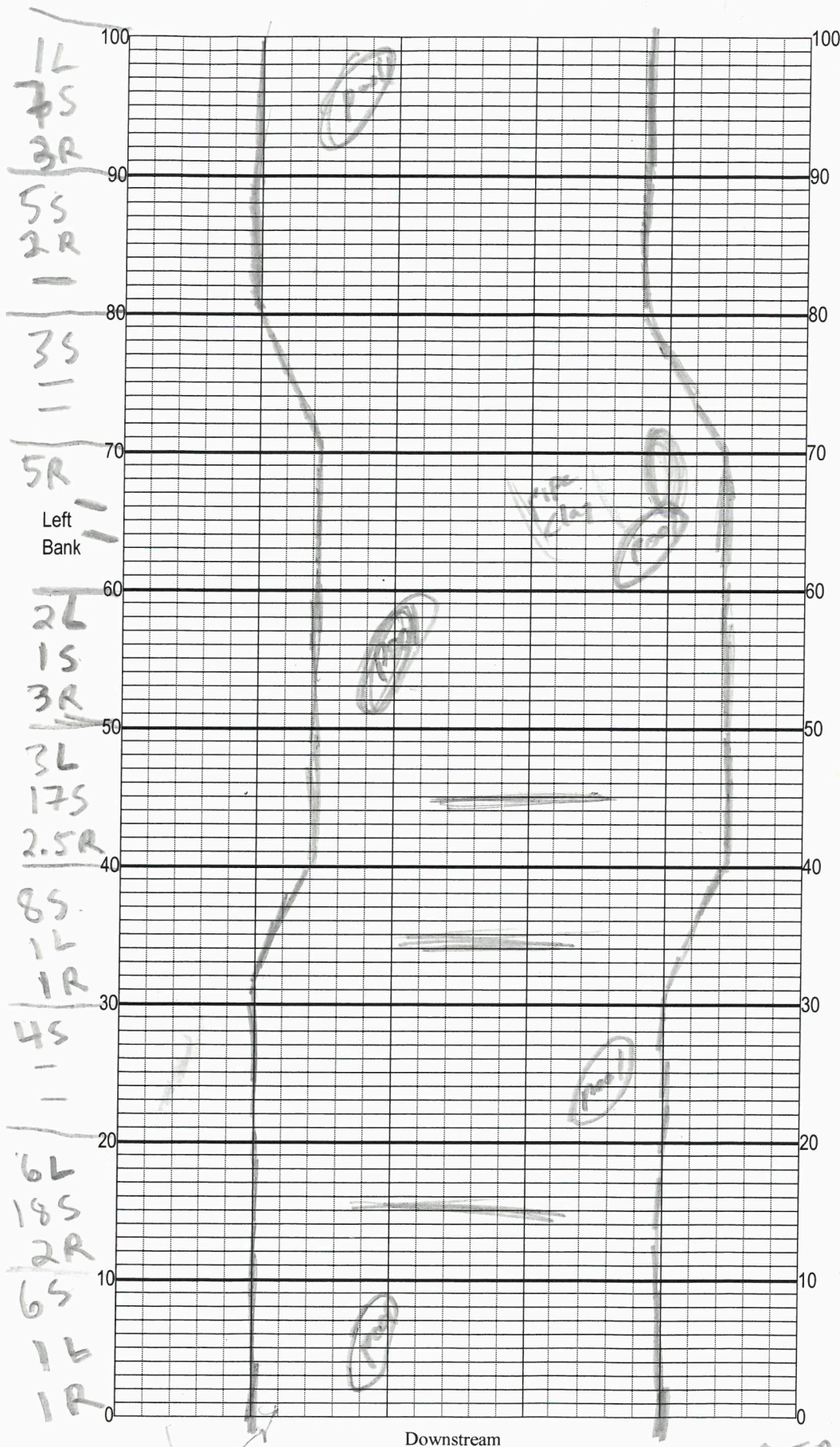
SAMPLING AGENCY: <u>FDEP</u>		STORET STATION NUMBER: <u>G1WA 0052</u>	DATE (MM/DD/YY): <u>6/7/2018</u>	RECEIVING BODY OF WATER: <u>Attopulquis Creek</u>
REMARKS:	COUNTY: <u>Gadsden</u>	LOCATION: <u>Swamp Creek</u>	FIELD ID/NAME:	

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>13</u>	20 19 18 17 16	15 14 <u>13</u> 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>4</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 6	Less than 5% major productive habitat 5 <u>4</u> 3 2 1
Water Velocity <u>18</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 <u>18</u> 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>14</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 <u>14</u> 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 <u>18</u>	20 19 <u>18</u> 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>5</u> Left Bank <u>5</u>	10 9	8 7 6	<u>8</u> 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>9</u>	<u>10</u> <u>9</u>	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>67</u>	10 9	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: <u>6-7-2018</u>	Analyst: <u>Curtis MUSSON</u>	Signature: <u>Curtis</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Swamp Creek

Date: 6/7/18

Sampler: Storrs/Masson

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐	Snags	2.5
☐	Roots/undercut banks	1.0
☐	Leaf Packs (or mats)	0.5
☐	Aquatic Macrophytes	4%
☐		
☐		
☐	Pools	total # observed = _____ # range expected = _____

Average width _____ m
Average depth _____ m

Velocity measured at 0 meter mark.

WQ & chemistry taken at _____ 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.

Plants observed / other notes:

3.5 velocity
3.0R 1.0
2.2L 0.5
10-S 2.5
6m width
3.76
3.76
0.285
4% habitat
2.1
19.5R
14L
65S
590
1.5
1.4
2.0

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

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

Waterbody: Swamp Creek Date: 6/7/18 County: Gadsden Storet Number: GLWA0052
Analyst: Curtis Mussen Signature: Curtis Mussen

Comments: SMP Sampling

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																							
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												Sagittaria latifolia																							
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 spiralis																							
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												No Macrophytes																							
>5 and ≤10% Macrophyte Coverage																																			
>10 and ≤25% Macrophyte Coverage																																			
>25 and ≤50% Macrophyte Coverage																																			
> 50% Macrophyte Coverage																																			

☒ < 2m2

QC'd by: *6/14/18*
 Approved: *6/22/18*

SBIO: 78433 RPS: 9032

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: *Swamp Creek* County: *Godsden* Date: *6/7/18* Investigators: *Starr/Musson*

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
0 <i>not found</i>	1	N			60	1	X		
	2	N				2	X		
	3	N		96		3	X		96
	4	X				4	X		
	5	X		10		5	X		
	6	X				6	X		
	7	N		40		7	N		
	8	N		[56]		8	N		[96]
	9	N				9	N		
10	1	N			70	1	N		
	2	N				2	N		96
	3	N		96		3	N		
	4	N				4	N		
	5	N		0		5	N		1
	6	N				6	X		4
	7	N		[96]		7	X		[92]
	8	N				8	N		
	9	N				9	N		
20	1	N			80	1	N		
	2	N				2	N		96
	3	N		96		3	N		
	4	N				4	N		
	5	N		1		5	N		0
	6	N		4		6	N		
	7	N		[92]		7	N		[96]
	8	N				8	N		
	9	N				9	N		
30	1	N			90	1	N		
	2	N				2	N		96
	3	N		96		3	N		
	4	N				4	N		
	5	N		7		5	N		2
	6	N		28		6	N		8
	7	N		[68]		7	N		[88]
	8	N				8	N		
	9	N				9	N		
40	1	N			100	1	N		
	2	N				2	X		96
	3	N		96		3	X		
	4	N				4	N		
	5	N		0		5	N		1
	6	N				6	N		4
	7	N		[96]		7	N		
	8	N				8	N		[92]
	9	N				9	N		
50	1	N			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.				
	2	N							
	3	N		96					
	4	N							
	5	N		0					
	6	N							
	7	N							
	8	N		[96]					
	9	N							

STORET Station Number: *GIWA0052*

Secchi depth *0.6*
 Estimated? *No*

points ranked 4-6 *0*
 total points assessed *85*
 % points ranked 4-6 *0*

Check accompanying data collected at same site/date.
 Algal mat sample ☐
 Linear Veg Survey ☒
 Habitat Assessment ☒
 SCI/Biorecon ☒
 Water sample ☒
 RQ-2018-06-04-36

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



Good my

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

QC'd by: *6/14/18*

SAMPLE ID 78433 ORG ID 21FLWQA LATITUDE 30.663
 COUNTY Gadsden STORET # G1WA0052 LONGITUDE -84.448
 DATE 6/7/2018 TIME 810 SAMPLING AGENCY _____
 SITE NAME Swamp Creek upstream of Railroad
 FIELD ID/NAME G1WA0052 RECEIVING BODY OF WATER Attapulgus Creek

RIPARIAN ZONE / STREAM FEATURES RQ-2018-06-04-36

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 5.5 m wide — m/s 0.29 m/s — m/s — m deep 0.3 m deep — m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718m</u> Right Bank: <u>>18m</u>				Hydrologic Modification Score (per FT 3101) <u>5-6</u>				
High Water Mark: <u>1.0</u> + <u>0.3</u> = <u>1.3</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>2.5</u></td> <td><u>5</u></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>1.0</u></td> <td><u>5</u></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.5</u></td> <td><u>5</u></td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand.....</td> <td><u>96</u></td> <td><u>5</u></td> <td></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>2.5</u>	<u>5</u>		Undercut Banks / Roots	<u>1.0</u>	<u>5</u>		Leaf Packs or Mat	<u>0.5</u>	<u>5</u>		Aquatic Vegetation				Rock or Shell Rubble..				Sand.....	<u>96</u>	<u>5</u>		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><u>0.3</u></td> <td><u>22.67</u></td> <td><u>7.04</u></td> <td><u>8.20</u></td> <td><u>94.9</u></td> <td><u>90</u></td> <td><u>0.04</u></td> <td><u>0.6</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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: <u>Biology #2</u>				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.3</u>	<u>22.67</u>	<u>7.04</u>	<u>8.20</u>	<u>94.9</u>	<u>90</u>	<u>0.04</u>	<u>0.6</u>	Mid:									Bottom:								
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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 Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA 7341020</u> Exp: <u>12/7/18</u> <u>AA 7341010</u> Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____																																																					
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System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																																																														
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																																	

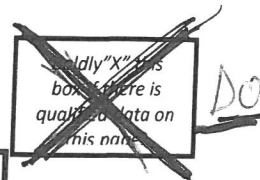
SAMPLING TEAM Storrs / Musson SIGNATURE: [Signature] DATE: 6/7/2018

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

Meter ID: Biology #2

RQ: 2018-06-04-36
2018-05-14-18

Project: SCF Swamp Creek
SCF Runway Creek



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 Storr	6/6/2018	1542	22.63	8.644	8.64	100.0	36.4		P/F	L/F
ICV	Jason Storr	6/6/2018	1544	22.56	8.644	8.65	100.0	35.9		P/F	L/F
CCV	Jason Storr	6/7/2018	1410	22.54	8.660	7.42	85.7	31.8		P/F	L/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 Storr	6/6/2018	1538	171005D #2	10/2018	1000	1000	P/F	L/F
ICV	Jason Storr	6/6/2018	1540	171005D #2	10/2018	1000	1000	P/F	L/F
CCV	Jason Storr	6/7/2018	1346	180326A #1	4/2019	100	103	P/F	L/F
CCV								P/F	L/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 Storr	6/6/2018	1530	171005B #2	04/2019	7.0	6.99	-2.1	P/F	L/F
Calibr.	Jason Storr	6/6/2018	1532	171005A	10/2018	4.0	4.00	170.5	P/F	L/F
Calibr.	Jason Storr	6/6/2018	1534	171005C #1	04/2019	10.0	10.00	-171.3	P/F	L/F
ICV	Jason Storr	6/6/2018	1536	171005C #1	04/2019	10.0	9.98	-170.3	P/F	L/F
CCV	Jason Storr	6/7/2018	1344	171005A	10/2018	4.0	4.0392	179.7	P/F	L/F
CCV									P/F	L/F

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

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

mV pH 10 Range -180 ± 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 Storr	6/6/2018	1541	0.00	0.00	P/F	(L) F

CCV
6/7/18
0.044

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

COMMENTS:

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WAS-SECT

Project ID: SMP

Requester: Curtis Musson

Collected By:

Stars / Musson

Field Report Prepared By:

Stars

Sampling Agency:

FDEP

Location		WIN ID / FILED ID		Collection (comp begin or grab)		Time		Composite end		Bottle Group(s)	
Field ID		Swamp Creek		☒ Comp ☒ Grab		6/7/18		Date		X	
WIN/STORET #		upstream of Railroad		Matrix (type, e.g., Salt, Fresh, etc)		Fresh		Diss. Oxygen		mg/L Total Res. Chlorine	
Latitude		dd dms		Temp (C)		22.67		pH		7.04	
Longitude		dd dms		Salinity (ppt)		0.04		ft		0.3	
Location				Comments		SCI collected		Sp. Conductance (umho/cm)		90	
Field ID				Collection (comp begin or grab)		Time		Composite end		Bottle Group(s)	
WIN/STORET #				☒ Comp ☒ Grab				Date		A, B	
Latitude		dd dms		Temp (C)				Diss. Oxygen		mg/L Total Res. Chlorine	
Longitude		dd dms		Salinity (ppt)				Sample Depth		ft	
Location				Comments				Sp. Conductance (umho/cm)			
Field ID				Collection (comp begin or grab)		Time		Composite end		Bottle Group(s)	
WIN/STORET #				☒ Comp ☒ Grab				Date			
Latitude		dd dms		Temp (C)				Diss. Oxygen		mg/L Total Res. Chlorine	
Longitude		dd dms		Salinity (ppt)				Sample Depth		ft	
Location				Comments				Sp. Conductance (umho/cm)			

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
<i>[Signature]</i>	6/7/18 1327	Dop off	1 cooler 3 jugs	<i>[Signature]</i>	6-7-18 1327

Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	ALKALINITY					
	TURBIDITY					
	W-CL-IC					
	W-COLOR					
	W-F					
	W-SO4-IC					
	W-TDS					
	W-TSS					
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CHLSUITE-W					
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	ECOLI-18QT					
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab
	W-ICP	Lot # NA 7341010		Exp 12/7/18		
	W-ICPMS					
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3					
	W-NO2NO3	Lot # SA 7341020		Exp 12/07/18		
	W-S-A-TP					
	W-TKN					
	W-TOC					
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F	Lot # 10827054				
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	ALGAL_ID					
Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab
	MI-FW-QLDC					3

Cooler Packing Worksheet for Request: RQ-2018-06-04-36

Swamp Creek SCI

Ship Cooler On: 5/31/2018

Customer/Project: WAS-SECT/SMP

Assigned To: KLUG_K

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Please return
packing list with
sample submittal
forms.

Comments:

No preservatives needed.

Group A: Nutrients, Metals, Micro

Group B: SCI, Algal ID

Packing Notes:

No Fedex labels

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1 Preservation: ICE

Lot # 00071006

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 # 1223623

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 # L18006

Description:

Analysis

ECOLI-18QT

Description

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

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot # 00070684

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-ICP

W-ICPMS

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 # 00070684

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 # 00070886

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: B

of Sites: 1

Container ID: PT-50ML

Qty: 1 Preservation: ICE

Lot # 03775003

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Container ID: PJ-2L

Qty: 2 Preservation: Formalin

Lot # BTQWASH

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: KK

Number of Coolers: 1

Date: 6/1/18

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☒ FedEx Bills, if applicable
- ☒ Plastic Bags/Zip Ties
- ☐ Acid Labels (sets of 24)

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2018-06-04-36