FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End of Day CCV Yes / ~~No~~ CM 4/14/21

WIN Station Name: Lewis Creek Upstream of 157 Date: 4/5/2021

WIN/Field ID: G1WA0075 WBID: 440 ENR: - Latitude: 30.608

County: GADSDEN Org ID: 21FLWQA Longitude: -84.3638

Receiving Body of Water: Ochlockonee - St. Marks RQ- 2021-01-04-29

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Curtis Musson	x	x			
[x] Evelyn Becerra			x	x	x
[ ]					
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [x] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Meter

Secchi Equipment ID:

Collection Method

- [x] Wading
- [ ] From Shore
- [ ] Other _____
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: [x] Normal [ ] Low [ ] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# EXO #1

Photos: NO Flow: FLOWing Tide: NA Tide Times: High: **NA** Low: NA

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

SBIO ID Numbers: SBIO ID: 81976; HA ID: 16809; RPS ID: 9696; Peri ID: 26565

Notes:

Algal ID Results: There was no clear dominant taxon in the sample. Other taxa present, Bacillariophyta

Duplicate Sample

Time Zone: EST Time: **na** Field ID: N/A (WIN ID_DUP)

WIN DMT Activity ID: _____

Blank

Time Zone: **na** Time: **na** Field ID: na (Blank Type_DDMMYYYY)

DI Source: **na** Location: na

DI Type: **na** Equipment ID: na

DI Container (Name/ID): **na** DI Container Type: **na**

LIMS EVENT ID: WAS-SECT-2021-04-05-01 **WIN Import ID:** 21FLWQA_WAS-SECT-04-05-01_07-21-2021.TXT

Enter Field Parameters, Verify Station ID In LIMS DMT: CM/04/14/2021 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** ESB 6/3/21 (Initials/Date)

Scan/Save Field Sheets _____ (Initials/Date) **Migrate Data to WIN:** DT 7/21/21 (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2021-01-04-29
Customer: WQAP
Project ID: SMP

Collected By: Curtis Musson, Evelyn Becerra
Field Report Prepared By: Curtis Musson
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G1WA0075

Location: Lewis Creek Upstream of 157

Comments:

Matrix: Fresh

(Check one) [X] GRAB [ ] COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C⁰)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
4/5/2021	1015 EST	8.34	88.7	18.327	6.8	0.05	0.15 [X] VOB (S)	0.15	58.4	0.03
							Central Lab please use top row for login purposes			
	EST									

Parameter Suite	Parameter Methods			Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	[X] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			[X] Ice [X] $H2SO_4$*	[X] <2	1	A
	Lot #	SA0353110	Exp:	01/11/22			
Metals (P-500ML)	[X] W-ICPMS [X] W-ICP [X] W-HARD			[X] Ice [X] HNO_3*	[X] <2	1	A
	Lot #	NA0344060	Exp:	01/04/22			
Filtered Nutrients (P125ML)	[X] W-PO4-F [X] Field Filtered 0.45 µm Filter			[X] Ice		1	A
	Filter Lot #	0079900					
	Syringe Lot #	1696888					
Chlorophyll (BP-1L)	[X] CHLSUITE-W			[X] Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	[X] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / TDS W-SO4-IC / W-			[X] Ice		1	A
Physical/Aggregate (Marine) (P-1L)	[ ] Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY			[ ] Ice			
Macroinvertebrates (PJ-2L)	[X] MI-FW-QLDC			[X] Formalin		3	
Periphyton (PT-50ML)	[X] ALGAE-ID			[X] Ice		1	B
Microbiology (Contract Lab Bottle)	[X] E Coli [ ] F Coli [ ] Enterococci [ ] Contract Lab			[X] Ice		1	A
Molecular (QPCR-P-500ML)	[ ] PCR-HF183 [ ] PCR-BacR [ ] PCR-DG3 [ ] PCR-GULL2 [ ] PCR-GFD [ ]			[ ] Ice			
Tracers (BG-500ML)	[X] W-E8321-DI [X] W-E8321-MS			[X] Ice		1	A
Pesticides (BG-500ML) (BG-1L)	[X] W-E8321-DI [X] WE8321-MS [X] W-PSNP-TQ [ ] W-CT-CL-R [ ] W-PCL-SQ-R [ ] W-CARB-AA (5 ml of MCAA** Buffer Solution) [ ] W-DIELDRIN			[X] Ice		4	A
Phytoplankton/Periphyton	[ ] DTM-QL-C [ ] PEN-QL-C [ ] DTY-QN-C [ ] PKD-QN-C [ ] DTM-QN-C [ ] PRN-QN-C [ ] PKD-QN-BV			[ ] Ice			

Name:
Curtis Musson
Evelyn Becerra

Signature: Evelyn B

Date: 4/5/21

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

QC ESB 6/3/21

SBIO ID: 81976 RPS ID: 9696

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Lewis Creek upstream 157 of F | County: Gadsden | Date: 4-5-21 | Investigators: Evelyn Becerra, Curtis Musson

STORET Station Number: GIWA0075

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	NO	
	2	N		
	3	N		
	4	N		
	5	N		94
	6	N		
	7	3		
	8	N		
	9	N		
10	1	N		
	2	N		
	3	N		
	4	N		
	5	N		95
	6	N		
	7	3		
	8	N		
	9	N		
20	1	N		
	2	N		
	3	N		
	4	N		
	5	3		96
	6	N		
	7	N		
	8	4		
	9	N		
30	1	N		
	2	N		
	3	N		
	4	N		
	5	N		94
	6	N		
	7	4		
	8	4		
	9	4		
40	1	N		
	2	N		
	3	N		
	4	N		
	5	3		96
	6	N		
	7	4		
	8	N		
	9	3		
50	1	N		
	2	3		
	3	4		
	4	3		
	5	4		95
	6	3		
	7	N	↓	
	8	4	NO	
	9	N		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
2	1	4	NO	
	2	3		
	3	4		
60	4	N		
	5	N		96
	6	N		
	7	N		
	8	N		
	9	N		
4	1	3		
	2	N		
	3	N		
70	4	4		
	5	4		96
	6	4		
	7	3		
	8	N		
	9	4		
2	1	3		
	2	N		
	3	3		
80	4	N		
	5	4		94
	6	3		
	7	N		
	8	4		
	9	3		
4	1	4		
	2	4		
	3	4		
90	4	3		
	5	N		96
	6	4		
	7	N		
	8	3		
	9	N		
4	1	N		
	2	N		
	3	N		
100	4	4		
	5	N		96
	6	4		
	7	N	↓	
	8	4	NO	
	9	5		

Secchi depth	VOB
Estimated?	NO
# points ranked 4-6	24
total points assessed	99
% points ranked 4-6	24%

Check accompanying data collected at same site/date.	
Algal mat sample	X
Linear Veg Survey	X
Habitat Assessment	X
SCI/Biorecon	X
Water sample	X
RQ-2021-04-04-24	

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

Entered (4/14/21) CM

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%.

8 16

SBFO ID: 81976

QC ESB 6/3/21

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

G1WA0075

Waterbody: Lewis Creek upstream of 157	Date: 4/5/21	County: Gadsden	Storet Number:
Analyst: Curtis Mussan		Signature: Curtis Mussan	
Comments: No aquatic Veg. <250m			

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m^2 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	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
	Meter Mark										
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	X	X	X	X	X	X	X	X	X	X	
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
	Meter Mark										
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											

Entered (4/6/2021) CM

SBIo ID: 81976
HA ID: 16809

Entered 4/14/21 cm

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP 21FLWQA		GIWA0075	04/05/21	Ocklocknee R.
REMARKS:	COUNTY: Gadsden	LOCATION: Lewis Creek at 157		FIELD ID/NAME: GIWA0075

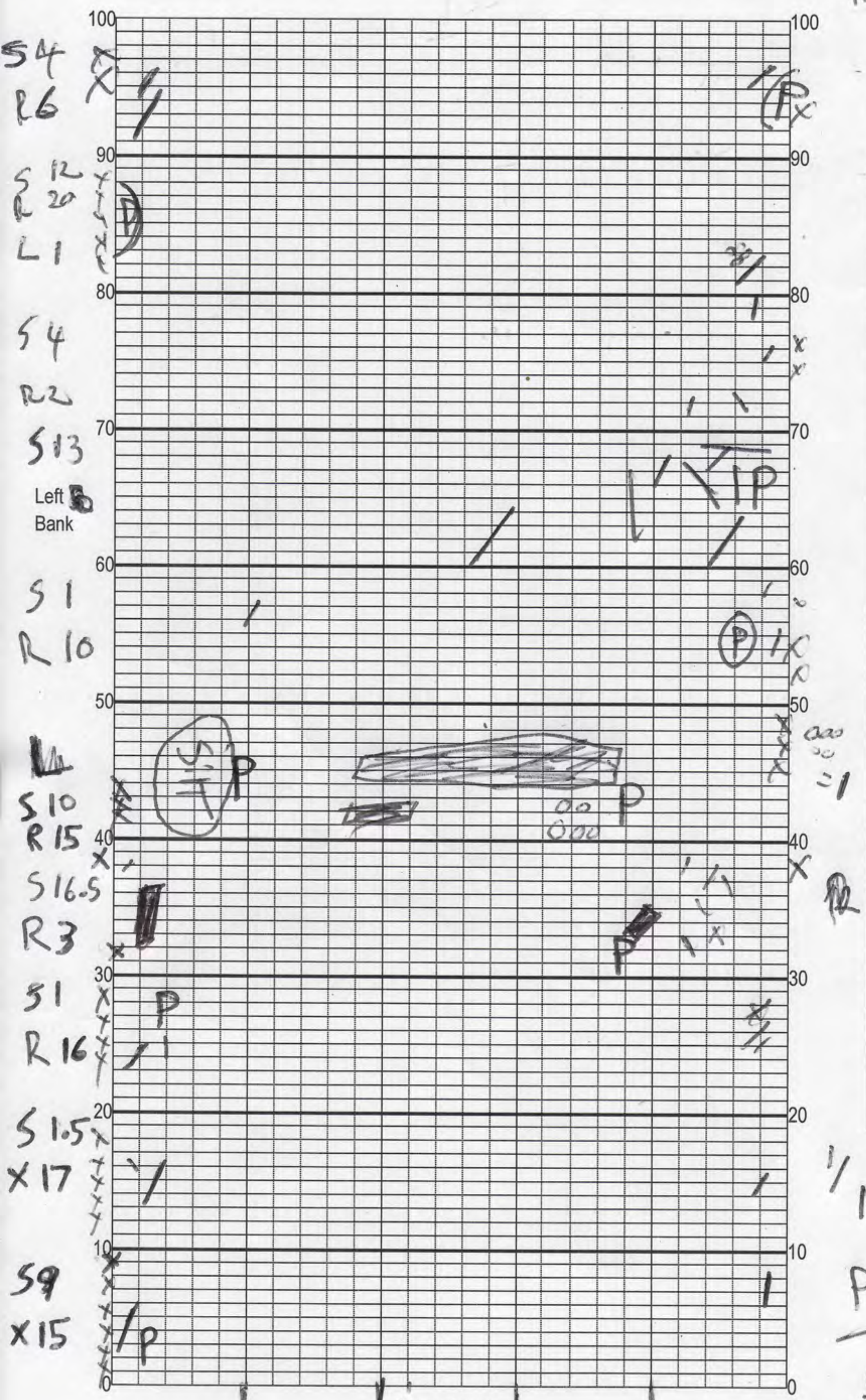
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 10	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. 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 8	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 20	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 12 Primary Score ~~12~~ cm 50	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. X 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** 11	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 or straightening 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 5 7 Left Bank −, +, + L −, −, + R	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the woody 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 woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 8 Left Bank 10	Width of vegetation greater than 18 m (10) 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 10 Left Bank 10 Secondary Score 61	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

111 **TOTAL SCORE**

Date: 4.5.21	Analyst: Curtis Musson	Signature:

SBFO ID: 81976
HA ID: 16809

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



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

Location: Lewis Creek 9+ 257

Date: 4.5.2021

Sampler: Curtis Musson

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.

		%
Snags		>2%
Roots/undercut banks		>3%
Leaf Packs (or mats)		<1%
Aquatic Macrophytes		0%
Pools	total # observed = 8; # range expected = 2-4	

Average width 5.1 m
Average depth 0.15 m

Velocity measured at 5 meter mark.

WQ & chemistry taken at 0 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:

1/1.89 sec = 0.53 M/S

Pools → 56 m² habitat, 30 m² H

High H_2O Mark 0.3 abv Surface

Sweep S = 72 ÷ 6.6 = 11 ≈ 30 m² Habitat
X = 104 ÷ 6.6 = 16 6%

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

SBID
SAMPLE ID 81976 ORG ID 21FLWQA LATITUDE 30.60799
COUNTY Gadsden STORET # GIWA0075 LONGITUDE -84.36349
DATE 4.5.2021 TIME 1015 SAMPLING AGENCY 21FLWQA
SITE NAME Lewis creek upstream of 157
FIELD ID/NAME GIWA0075 RECEIVING BODY OF WATER Ochlockonee River

RIPARIAN ZONE / STREAM FEATURES

WBID LDI and Watershed LDI

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
42%	17%	11%	7%	17%	2%	2%	1% Reservoirs

Landscape Development Intensity Index (LDI): 2.80

Local Watershed Erosion (select one) : ☐ None ☒ Slight ☒ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank : >18 Right Bank : >18

Hydrologic Modification Score (per FT 3101) : 5-6

High Water Mark: 0.3 (m) + 0.15 (above present water level) = 0.45 (present depth) (above bed)

Artificially Impounded ☒ Yes ☐ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
5.1 m wide

m/s	1.89 m/s	m/s
m deep	0.15 m deep	m deep

Artificially Channelized : ☐ NO ☒ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % ☐ Open ☒ Heavily Shaded ☐ Lightly Shaded (11-45%) ☐ 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

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	>2	7	4
Undercut Banks / Roots	>3	7	0
Leaf Packs or Mat	<1	1	0
Aquatic Vegetation	0	0	0
Rock or Shell Rubble..	0	0	0
Sand.....	>80	5	0
Mud / Muck / Silt	0	0	0
Other			
Other			

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☐	☐	☐	☐
Fish:	☐	☐	☒	☐
Aquatic Plants:	☒	☐	☐	☐
Iron/Sulfur Bacteria:	☒	☐	☐	☐

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :								
Mid:	0.05	18.3	6.8	8.34	88.7	58.4	0.03	☒ VOB
Bottom	0.15							TOTAL DEPTH
								0.15

Meter ID: WAS EXO

Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: On Field Sheet Exp:

Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐

Algae Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: FCE Exp: —

Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐

AMBIENT FIELD CONDITIONS / NOTES:
Normal Flow
Lots of (Asian?) clams

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM Curtis Musson, Evelyn Becerra

SIGNATURE : Curtis Musson

DATE : 4/6/2021

62-160.800, F.A.C. Entered (4/14/2021) CM

Revision Date: January 2017

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

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

Meter ID: WAS EXO RQ- 2021-0-04-29 Project: SAP SCE

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.

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/5/2021	854	20.6	762	9.0		100.3			P / F	L / F
ICV	Curtis Musson	4/5/2021	856	20.5	762	9.0	9.03	100.3			P / F	L / F
CCV	Curtis Musson	4/5/2021	415	20.45	759	9.0	8.98	99.7			P / F	L / F
CCV											P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/5/21	823	20/209H	12/204	1000	1000	P / F	L / F
ICV	Curtis Musson	4/5/21	824	20/209H	12/2021	1000	1001	P / F	L / F
CCV	Curtis Musson	4/5/21	412	2911C93	11/204	100	102.2	P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	4/5/21	828	200407B	10/2021	7.02	20.5	7.02	-20	P / F	P / F
Calibr.	Curtis Musson	4/5/21	832	20/209E	06/2022	4.00	20.5	4.00	148	P / F	L / F
Calibr.	Curtis Musson	4/5/21	836	200407A	10/2021	10.05	20.4	10.05	-182	P / F	L / F
ICV	Curtis Musson	4/5/21	841	20/209E	06/2022	4.00	20.5	4.08	142	P / F	L / F
CCV	Curtis Musson	4/5/21	408	200407B	10/2021	7.01	20.6	7.06	-20	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 ± 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)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)
If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____
If NO, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: _____; Date of last 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	—	—	—	—	—	P / F	L / F

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

COMMENTS:

Form effective August 1, 2018

RQ-2021-01-04-29	**Collected By**: Curtis Musson, Evelyn Becerra
Customer: FDEP	**Field Report Prepared by**: Curtis Musson, Evelyn Becerra
Project ID: SMP	**Sampling Agency**: FDEP
WIN ID/Field ID:  **WIN ID/Field ID:** G1WA0075 **Location**: Lewis Creek Upstream of 157	**Comments**:
Matrix: Fresh	(Check One) ✓Grab ☐ Composite

Date and Time	DO (mg/L)	DO (%SAT)	Temp. ©	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTh
4/5/2021 1015	8.34	88.7	18.327	6.8	0.05	0.15	0.15	58.4	0.03
Central Lab please use top row for login purposes									

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	x W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP **Lot #** SA0353110 **Exp:** 01/11/22	x Ice x H2SO4*	**X** <2	1	A
Metals (P-500ML)	x W-ICPMS x W-ICP x W-HARD **Lot #** NA0344060 **Exp:** 01/04/22	x Ice x HNO3*	**X** <2	1	A
Filtered Nutrients (P125ML)	x W-PO4-F x Field Filtered 0.45 um Filter **Filter Lot #** **79900** **Syringe Lot #** **1696888**	x Ice		1	A
Chlorophyll (BP-1L)	x CHLSUITE-W	x Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	X Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS	X Ice		1	A
Physical/Aggregate (Marine) (P-1L)	Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	Ice			
Macroinvertebrates (PJ-2L)	X MI-FW-QLDC	x Ice		3	B
Periphyton (PT-50ML)	X ALGAE-ID	x Ice		1	
Microbiology (Contract Lab Bottle)	X E Coli F Coli Enterococci Contract Lab	x Ice		1	A
Molecular (QPCR-P-500ML)	PCR-HF183 PCR-BacR PCR-DG3 PCR-GULL2 PCR-GFD	Ice			
Tracers (BG-500ML)	X W-E8321-DI X W-E8321-MS	x Ice		1	A
Pesticides (BG-500ML) (BG-1L)	X W-E8321-DI X W-E8321-MS X W-PSNP-TQ W-DIELDRIN W-PCL-SQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution) W-CT-CL-R	x Ice		4	A
Phytoplankton	DTY-QN-C PKD-QN-BV	Ice			

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date:	4/5/2021	**Collected By:**	Curtis Musson, Evelyn Becerra
Customer:	WAS	**Sampling Agency:**	FDEP
RQ:	RQ-2021-01-04-29	**Project ID**:	SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 1 **Delivery Method:** HandDelivered

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
Lewis Creek Upstream of 157	G1WA0075

RELINQUISHED BY(SIGNATURE): **DATE/TIME**: 4/5/21 3:58

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: **Rec'd/Inspected Date**:

Cooler Packing Worksheet for Request: RQ-2021-01-04-29
SCI Kit #1
Ship Cooler On: 12/23/2020
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, CHLA, 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 #** 00078451

Description: Plastic Bottle 1L

Analysis	Description
ALKALINITY	Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Turbidity in aqueous matrices
W-CL-IC	Chloride in aqueous matrices
W-COLOR	True Color measured at 450 nm (not valid for NPDES monitoring)
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Sulfate in aqueous matrices
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L **Qty: 1** **Preservation: ICE** **Lot #** 1293137

Description: Brown Plastic Bottle 1L

Analysis	Description
CHLSUITE-W	Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-250ML-WO-THI **Qty: 1** **Preservation: ICE** **Lot #** L20275

Description: 250 ml Sterilized no tablet

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

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Container ID: BG-500ML **Qty: 1** **Preservation: ICE** **Lot #** 0078488

Description: Brown Glass Bottle 500ML Affix BLUE dot to container.

Analysis	Description
W-E8321-DI	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
W-E8321-MS	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML **Qty: 1** **Preservation: HNO3** **Lot #** 0078385

Description: Plastic Bottle 500 mL Affix RED nitric acid dot to container.

Analysis	Description
W-HARD	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
W-ICP	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
W-ICPMS	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

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Container ID: P-500ML **Qty: 1** **Preservation: ICE And H2SO4** **Lot #** 0078385

Description: Plastic Bottle 500 mL Affix YELLOW sulfuric acid dot to container.

Analysis	Description
W-NH3	Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML **Qty: 1** **Preservation: FILTER-ICE** **Lot #** 0076883

Description: Plastic Bottle 125 mL

Analysis	Description
W-PO4-F	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Container ID: BG-1L **Qty: 4** **Preservation: ICE** **Lot #** 00077472

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis	**Description**
W-PSNP-TQ	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group: B

# of Sites: 1

Container ID: PT-50ML **Qty: 1** **Preservation: ICE** **Lot #** 05220038

Description: Plastic Tube 50 mL

Analysis	**Description**
ALGAL_ID	Qualitative assessment of algal taxa present without counts

Container ID: PJ-2L **Qty: 2** **Preservation: Formalin** **Lot #** [illegible]

Description: Plastic Jar 2 L

Analysis	**Description**
MI-FW-QLDC	No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: ABS Number of Coolers: 1 Date: 12-29-20

Kit must also include:

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

If Preservation Included:

ID	Exp	Lot #

PLEASE RETURN ALL COOLERS FOR RQ-2021-01-04-29