FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

Data Qualified? Yes / (No)

STORET Station Name: Munson Slough at CR 2204 **Date:** ~~09/19/2016~~ CM 09-26-2016 (mm/dd/yyyy)

STORET Station ID: G1WA0035 **WBID:** 807 **Latitude:** 30.3243 (Decimal Degrees)

County: Leon **RQ -** ~~2016-09-19-42~~ CM -26-22 **ORG ID:** 21FLWQA **Longitude:** -84.302 (Decimal Degrees)

Receiving Body of Water: Wakulla Springs **Field ID:** ~~G1WA0035-09192016~~ CM G1WA0035-092620 16

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson	X		X		
~~Jon Woods~~ Paul Kaur		X		X	X

Sampling Equipment

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

Equipment ID

Collection Method

- [x] Wading
- [ ] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

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

Matrix: Fresh / Marine / DI

Meter ID#

Photos: Yes / No

Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	11:15	0.3	0.7	2.99	37.2	6.62	0.03	1 ft	63	26.97
CEN										

Biological Samples Collected: None HA SCI LVS RBS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	620120	7-27-17	[x] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[x] MI-FW-QLDC	[x] Formalin			
Microbiology	[ ] E Coli [ ] F Coli [ ] Entero [ ] QPCR	[ ] Ice			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PC-AA-SF [ ] W-UHERB-AA [ ] W-GLYPH	[ ] Ice [ ] Other			

Place Preservative Sticker(s) Here (If Available)

Notes:
SBIO ID: 76924
RBS ID 8351

Place Label Here (If Available)

Signature:

Date:

Field Parameters Entered into LIMS: DS 9/29/16 (Initials/Date)

Field Parameters QC in LIMS: (Initials/Date)

Date Migrated to STORET: (Initials/Date)

Field Sheets Scanned/Saved: (Initials/Date)

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

SAMPLING AGENCY: Florida Department of Environmental Protection		STORET STATION NUMBER: GIWA0035	DATE (MM/DD/YY): 9/26/16	RECEIVING BODY OF WATER: Wakulla Springs
REMARKS:	COUNTY: Leon	LOCATION: Munson Slough at CR2204		FIELD ID/NAME:

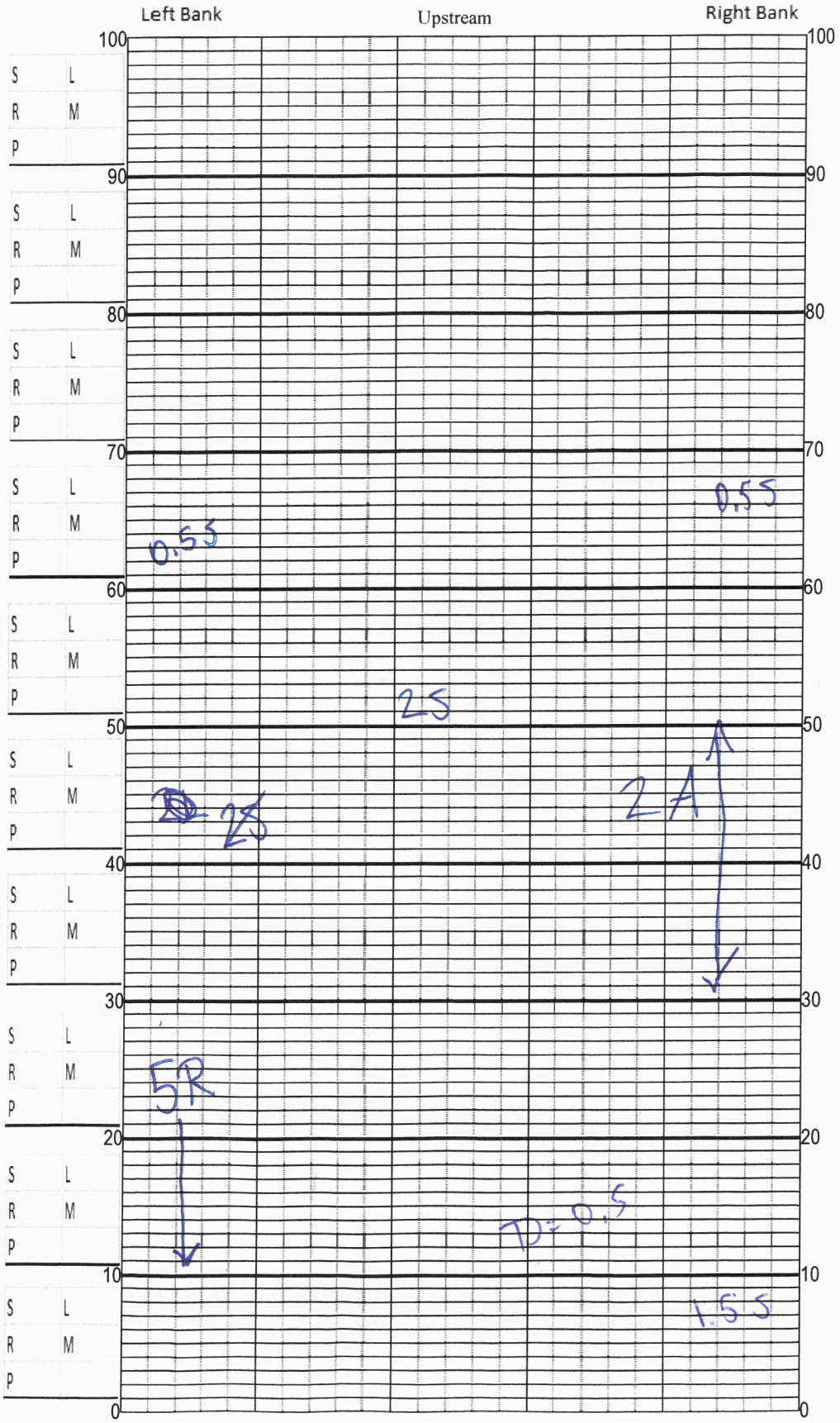
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components (Snag, Roots, Leaf, Rock, Aquatic Vegetation) **Substrate Diversity** 14	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major 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 3 ____%	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 12 0.14 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 12 ---- Primary Score 41	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. 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 7 Left Bank 7 If Banks are PipeClay, BedRock or Concrete at Bank full: Optimal	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 10 Left Bank 10 ---- Secondary Score 74	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

115 **TOTAL SCORE**

Date: 9/26/16	Analyst: Curtis Musson	Signature:

SBIO ID: 76924

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



Location: GIWA0035 Munson Slough

Date: 9-26-16

Sampler: Blair / Musson

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.		%
S	Snags	S
R	Roots/undercut banks	R
L	Leaf Packs (or mats)	L
M	Aquatic Macrophytes	A
Rc	Rock	K
P	Pools — total # observed = ____ ; # range expected = ____	

Average width 8 m

Average depth 0.5 m

Velocity measured at _____ meter mark.

Velocity _____ m/s

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.

Notes/Plants Observed:
$2m^2$ = 16 Sweeps

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

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

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

# 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	

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

Waterbody: Munson Slough at CR 2204	Date: 9/26/16	County: Leon	Storet Number: G1WA0035
Analyst: Curits Musson		Signature: Curt M	
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 m^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)
Alternanthera philoxeroides				X		X					
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				X		X					
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
Micranthemum glomeratum				X	D						
Micranthemum umbrosum											
Mikania scandens											
Myriophyllum aquaticum											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	X	[illegible]	X	X	X	X	X	X	X	X	
>5 and ≤10% Macrophyte Coverage		[illegible]									
>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)
Myriophyllum heterophyllum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Peltandra virginica											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides		X	X	X	X						
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Rhynchospora inundata											
Rosa palustris											
Ruellia simplex											
Rumex verticillatus											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Scirpus (schenoplectus) californicus											
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											

SBIo ID: 76924

Macro ID: 10093

Macrophyte QC Report

STORET: G1WA0035
Visit ID: 76924
Macrophyte ID: 10093
LIMS ID:

Sample Date: 9/26/2016
Collector Name: Musson, Curtis
Identifier Name: Musson, Curtis

Macrophyte Sample Comments:

Taxa Name:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Alternanthera philoxeroides				P		P				
Lemna				P		P				
Micranthemum glomeratum				P	D					
Polygonum hydropiperoides		P	P	P	P					

CM 10/3/16

This data has not been fully approved at this time.

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Munson Slough at CR 2204 | County: Leon | Date: 9/26/16 | Investigators: Curtis McSca

STORET Station Number: G1W40035

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
10	1			
	2			
	3			
	4			X
	5			
	6			
	7			
	8			
	9			
20	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
30	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
40	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
50	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8	↓		
	9	N		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N	Y	
	2	↓	↓	
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
70	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
80	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
90	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8			
	9			
100	1			
	2			
	3			
	4			
	5			X
	6			
	7			
	8	↓	↓	
	9	N	N	

Secchi depth	108
Estimated?	

# points ranked 4-6	0
total points assessed	99
% points ranked 4-6	0

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	X
Habitat Assessment	X
SCI/Biorecon	X
Water sample	X
RQ-2016-09-26-22	

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

SBIO ID: 76924

RPS ID: 8351

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%.

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

SAMPLE ID 76924 | ORG ID 21FLWQA | LATITUDE 30.3243
COUNTY Leon | STORET # G1WA0035 | LONGITUDE -84.302
DATE 9-26-16 | TIME 1115 | SAMPLING AGENCY FDEP
SITE NAME Munson Slough at CR 2204
FIELD ID/NAME G1WA0035- 09262016 | RECEIVING BODY OF WATER Wakulla Springs

RIPARIAN ZONE / STREAM FEATURES

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

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
40.1	16.4	0.4	0.2	25.2	9.7	7.0	1.0

Landscape Development Intensity Index (LDI): 4.0

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 : 718 | Right Bank : 718

Hydrologic Modification Score (per FT 3101): 7-8

High Water Mark: 0.5 (m) + 0.5 (above present water level) = 1.0 (above bed) | (present depth)

Artificially Impounded: ■ Yes ☐ No

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

8 m wide

m/s	0.14 m/s	m/s
m deep	0.5 m deep	m deep

Artificially Channelized : ☐ No ☒ Some recovery ☒ Mostly recovered, more sinuous ☐ 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

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

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :								
Mid:	0.3	26.97	6.62	2.97	37.2	63	0.03	☒ VOB
Bottom								TOTAL DEPTH

Meter ID: Biology #2 | 0.5

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:_____ Exp:_____

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

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

Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐

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

ABUNDANCE

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

AMBIENT FIELD CONDITIONS / NOTES:

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

SAMPLING TEAM Curtis Musson, Paul Blair | SIGNATURE : | DATE : 9/26/2016

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 Bioloy #2 RQ- 2016-09-26-22 Project SAP

Notes: (1) Numbers ≤4, are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
(2) Always wait for meter to stabilize before recording any readings.
(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 06/03/2016

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.	Curtis Musson	9/26/16	7:24	21.14	8.998	8.89	100.0	45.1	—	P	LAB
ICV	Curtis Musson	9/26/16	7:30	21.14	8.998	8.89	100.0	46.1	—	P	LAB
CCV	Curtis Musson	9/26/16	12:31	24.66	8.325	8.50	102	46.1	—	P	LAB
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.
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; 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	9/26/16	7:33	160330D	04/2017	1000	1000	P	LAB
ICV	Curtis Musson	9/26/16	7:34	160330D	04/2017	1000	1000	P	LAB
CCV	Curtis Musson	9/26/16	~~12:33~~ 12:36	260533	12/2017	100	105	P	LAB
CCV									

Report specific conductance as a whole number with no decimal figure. Conductivity Acceptance criteria ± 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.	Curtis Musson	9/26/16	7:36	160330B	10/2017	7.0	7.00	-23.6	P	LAB
Calibr.	Curtis Musson	9/26/16	7:38	160330A	04/2017	4.01	4.01	155.4	P	LAB
Calibr.	Curtis Musson	9/26/16	7:40	160330C	10/2017	10.01	9.98	-191.0	P	LAB
ICV	Curtis Musson	9/26/16	7:42	160330C	10/2017	10.01	9.98	-191.1	P	LAB
CCV	Curtis Musson	9/26/16	12:32	160320A	04/2017	4.01	3.99	155.6	P	LAB
CCV										

Report pH with one decimal place; pH Acceptance criteria ±0.2 SU; mV pH7 Range 0±50; mV pH 4 Range +180±50;
mV pH 10 Range -180±50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly) Date of Last Depth Verification _____

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air				0.000			

ICV acceptance criteria ±5 % or ±0.05m, whichever is greater

Request Number: RQ-2016-09-26-22

Killearn Chain of Lakes Outlet, Alford Arm Tributary and Soapstone Branch

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Apr 7, 2016

Customer: WQAP

Project ID: SMP

Requester: Benjamin Ralys

Collected By: Paul Blair / Curtis Musson

Field Report Prepared By: Paul Blair

Sampling Agency: FDEP/21FLWQA

Field	Sample 1	Sample 2	Sample 3	Sample 4
Location	Killearn Chain of Lakes Outlet @ Velda Dairy Rd	Lake Arrowhead @ boat dock @ Turtle Creek	Munson Slough @ CR2204	
Field ID	GIWA0015-09262016	GIWA0004-09262016	GIWA0035-09262016	
STORET #	GIWA0015	GIWA0004	GIWA0035	
Latitude (☑ dd ☐ dms)	30.53735	30.568517	30.3243	☐ dd ☐ dms
Longitude (☑ dd ☐ dms)	-84.22847	-84.218058	-84.302	☐ dd ☐ dms
☐ Comp / ☑ Grab	Grab	Grab	Grab	☐ Comp ☐ Grab
Collection (comp begin or grab) Date	9-26-16	9-26-16	9-26-16	
Time (Eastern/Central)	8:40 (Eastern)	9:10 (Eastern)	11:15 (Eastern)	
Composite end Date / Time				
Matrix (type, e.g., Salt, Fresh, etc)	Fresh (circled)	Fresh (circled)	Fresh (circled)	
Diss. Oxygen (☐ mg/L ☐ % sat)	5.71 / 68.1	6.55 / 84.5	2.97 / 37.2%	
Total Res. Chlorine (mg/L)				
Temp (C)	24.2	28.6	26.97	
pH	6.69	7.01	6.62	
Sample Depth (☐ ft ☑ m)	0.1	0.3	0.3	☐ ft ☐ m
Sp. Conductance (umho/cm)	70	68	63	
Salinity (ppt)	0.03	0.03		
Comments			SCI not on same RQ	
Bottle Group(s) (See pg 2)	A	A	A	

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Blair/Musson	9-26-16 12:08	Hand delivered		[illegible]	9-26-16 / 12:08

Cooler Packing Worksheet for Request: RQ-2016-09-26-22
Killearn Chain of Lakes Outlet, Alford Arm Tributary and Soapstone Branch
Ship Cooler On: 9/12/2016 Requester: Benjamin Ralys
Customer/Project: WQAP/SMP Priority: 3

850-245-8443
2600 Blair Stone Rd
MS #3560
Tallahassee, FL 32399-2400

Attn: Benjamin Ralys

Comments:
No preservatives needed.

Bottle Group A: Freshwater kits no metals
Bottle Group B: Algal ID
Bottle Group C: SCI

Requested Analyses:

Bottle Group: A # of Sites: 3

Container ID: P-1L **Qty: 3** **Preservation: ICE** **Lot #** 00065181

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
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: BP-1L **Qty: 3** **Preservation: ICE** **Lot #** 1172350

Description: Brown Plastic Bottle 1L

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

Container ID: P-500ML **Qty: 3** **Preservation: ICE And H2SO4** **Lot #** 00065372

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: 3** **Preservation: ICE-FLTR** **Lot #** 00064846

Description: Plastic Bottle 125 mL

Analysis	Description
W-PO4-F	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 #** 430897

Description: Plastic Tube 50 mL

Analysis	Description
ALGAL_ID	Qualitative assessment of algal taxa present without counts

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Cooler Packed By: SK Date: 9-19-16

DEP Cooler ID #(s): 1 Cooler

Kit must also include:

- ✓ Field Sheets
- ✓ Temperature Control Bottle (1 per cooler)
- ___ FedEx Bills, if applicable (1 per cooler)
- ✓ Plastic Bags
- ✓ Zip Ties

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2016-09-26-22