FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End of Day CCV Yes / No

WIN Station Name: Alford Arm Tributary At Miccosukee Rd. **Date:** 3/8/2021

WIN/Field ID: G1WA0066 **WBID:** 647M **ENR:** - **Latitude:** 30.4973

County: LEON **Org ID:** 21FLWQA **Longitude:** -84.171

Receiving Body of Water: Ochlockonee - St. Marks **RQ-** 2021-03-08-06

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Curtis Musson		x			
[x] Blake Spencer	x	x	x	x	x
[ ]					
[ ]					

Sampling Equipment

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

Depth measured with: MeterStick

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:** FLOW **Tide:**

Tide Times: High: Low:

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

SBIO ID Numbers: SBIO: 81933 HA: 16812 RPS: 9700 Macrophyte: 11796 LIMS: 2229909

Notes:

Duplicate Sample

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

WIN DMT Activity ID: _____

Blank

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

DI Source: _____ **Location:** _____

DI Type: _____ **Equipment ID:** _____

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

LIMS EVENT ID: WAS-SECT-2021-03-09-02 **WIN Import ID:** 21FLWQA_WAS-SECT-2021-03-09-02_06-04-2021.TXT

Enter Field Parameters, Verify Station ID In LIMS DMT: SBS 4/21/21 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** ESB 5/21/2021 (Initials/Date)

Scan/Save Field Sheets SBS 4/21/21 (Initials/Date) **Migrate Data to WIN:** DFT 6/4/21 (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2021-03-08-06
Customer: WQAP
Project ID: SMP

Collected By: Curtis Musson, Blake Spencer
Field Report Prepared By: Curtis Musson
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G1WA0066

Location: Alford Arm Tributary At Miccosukee Rd.

Comments:

Matrix: Fresh

(Check one) ☒ GRAB ☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
3/8/2021	1434 EST	11.6	115.4	15.14	5.88	0.15	0.3 ☒ VOB (S)	0.3	35.2	0.02
							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)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ $H2SO_4$*	☒ <2	1	A
	Lot # Sa0353110 **Exp:**	1-11-22			
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO_3*	☒ <2	1	A
	Lot # Na0344060 **Exp:**	1-4-22			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 16968882				
	Syringe Lot # 0079900				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☒ MI-FW-QLDC	☒ Formalin		2	B
Periphyton (PT-50ML)	☒ ALGAE-ID	☒ Ice		1	B
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐	☐ Ice			
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice		1	A
Pesticides (BG-500ML) (BG-1L)	W-E8321-DI; WE8321-MS; x W-PSNP-TQ; W-CT-CL-R; x W-PCL-SQ-R; W-CARB-AA (5 ml of MCAA** Buffer Solution); x W-DIELDRIN	☒ Ice		8	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
Blake Spencer

Signature: Blake Spencer

Date: 3/8/21

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

Entered by: [illegible] 4/21/21
QC ESB 5/21/2021

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

SBIO: 81933

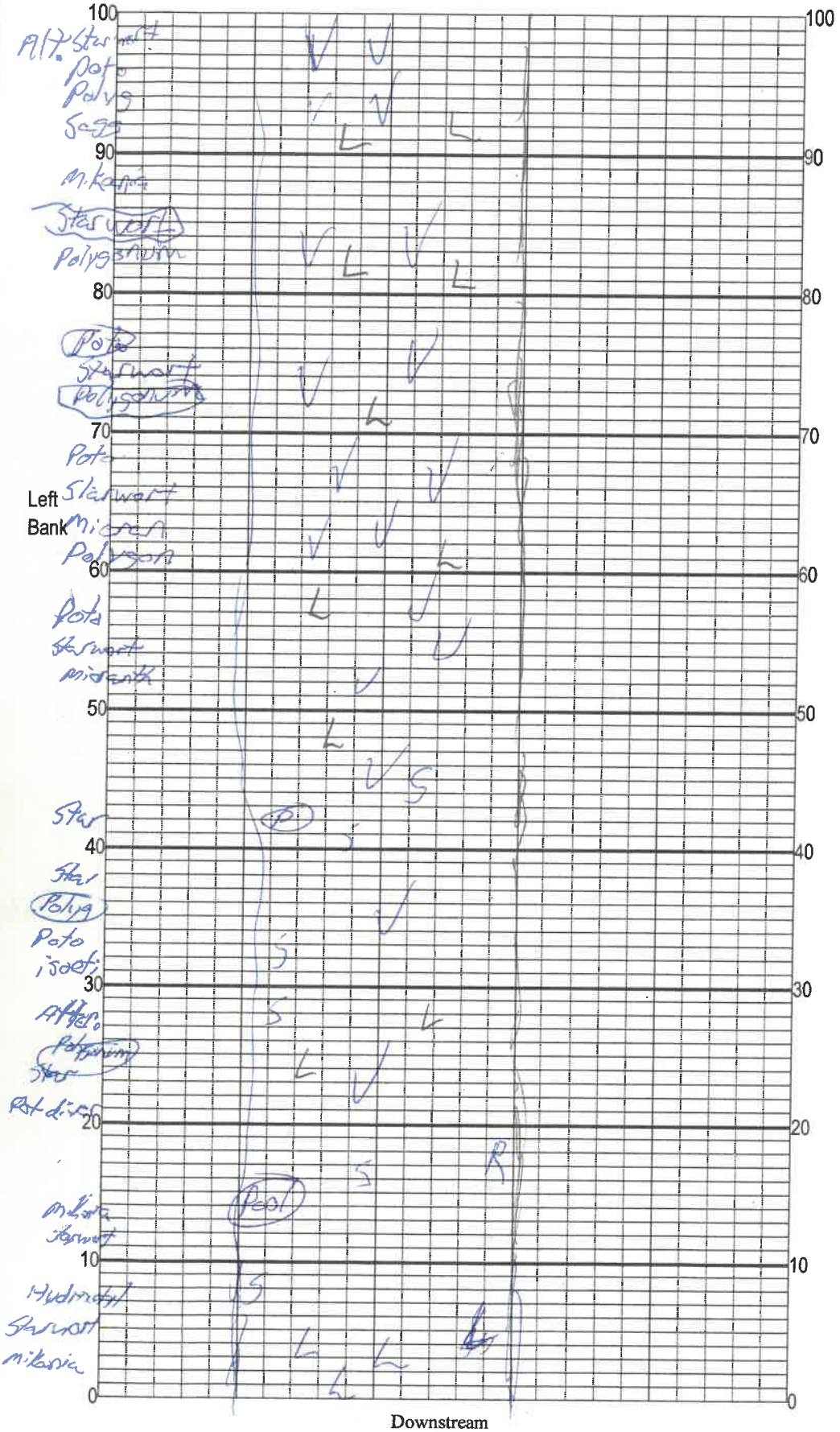
SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP		GIWA0066	3/8/21	Ochlockonee - St Marks
REMARKS:	COUNTY:	LOCATION:		FIELD ID/NAME:
HA: 16812	Leon	Alford Arm Tributary @ Miccosukee Rd		GIWA0066

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 13	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 13	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 47	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** 16	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 10 Left Bank 10	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 9 Left Bank 9	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 9 Left Bank 9 Secondary Score 72	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

(119) **TOTAL SCORE**

Date:	Analyst:	Signature:
3/8/21	Blake Spencer	[signature]

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: Alford Arm Tributary @ Miccosukee Rd.

Date: 3/4/21

Sampler: Blake Spencer

100 m: Latitude	—
Longitude	—
0 m: Latitude	—
Longitude	—

Substrates: Code key, draw proportionate habitat abundance.

		%
S	Snags	2%
R	Roots/undercut banks	0.4%
L	Leaf Packs (or mats)	8%
V	Aquatic Macrophytes	13%
P	Pools	total # observed = ____ # range expected = ____

Average width 2.5 m

Average depth 0.3 m

Velocity measured at 30 meter mark.

WQ & chemistry taken at 20 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 m / 5.5 sec

1 m / 5.5 sec

62-160.800, F.A.C

Revision Date: January 2017

Entered by: BAR 4/21/21

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

SAMPLE ID 81933 | ORG ID 21FLWQA | LATITUDE 30.4973
COUNTY Leon | STORET # GIWA0066 | LONGITUDE -84.171
DATE 3/8/21 | TIME 1434 | SAMPLING AGENCY FAEP
SITE NAME Alford Arm Tributary @ Miccosukee Rd.
FIELD ID/NAME GIWA0066 | RECEIVING BODY OF WATER Ochlockonee - St. Marks

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)

Landscape Development Intensity Index (LDI):

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: 12-18m | Right Bank: 12-18m

Hydrologic Modification Score (per FT 3101): 3-4

High Water Mark: 0.2 (m) + 0.3 (above present water level) = 0.5 (present depth) (above bed)

Artificially Impounded: ☐ Yes ☒ No

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

m/s	0.18 m/s	m/s
m deep	0.3 m deep	m deep

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

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☒	☐	☐
Silt Smothering:	☐	☒	☐	☐
Algae Smothering:	☐	☐	☒	☐

SUBSTRATE TYPE
Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	2	11	
Undercut Banks / Roots	0.4	1	
Leaf Packs or Mat	8	IIII	
Aquatic Vegetation	13	IIII	
Rock or Shell Rubble..			
Sand.....		III	
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.15	15.14	5.86	11.60	115.4	35.2	0.02
Mid:							
Bottom							

SECCHI (M): ☒ VOB
TOTAL DEPTH: 0.3
Meter ID:

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: See Field Exp: Sheets

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 ☐

ABUNDANCE

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

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

AMBIENT FIELD CONDITIONS / NOTES:

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

SAMPLING TEAM: Blake Spencer + Curtis Musson
SIGNATURE: Blake
DATE: 3/8/21

Entered by: BRK 4/21/21
QC ESB 5/21/2021

SRTO: 81933 RPS: 9700

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Alford Arm Trib. @ Mill | County: Leon | Date: 3.8.21 | Investigators: Curtis Mussen

STORET Station Number: GIWA 0066

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2	6		
	3	6		
	4	6		
	5	6		96
	6	6		
	7	6		
7	8	6		
	9	N		
10	1	6		
	2	6		
	3	6		
	4	N		
	5	6		96
	6	6		
	7	6		
8	8	6		
	9	5		
20	1	4		
	2	6		
	3	6		
	4	6		
	5	6		96
	6	6		
	7	4		
9	8	4		
	9	4		
30	1	4		
	2	5		
	3	5		
	4	N		
	5	N		96
	6	6		
	7	6		
6	8	6		
	9	N		
40	1	4		
	2	5		
	3	6		
	4	6		
	5	6		94
	6	6		
	7	6		
8	8	6		
	9	3		
50	1	6		
	2	6		
	3	6		
	4	6		
	5	6		91
	6	6		
	7	6		
	8	6		
9	9	4		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	4		
	2	6		
	3	6		
	4	6		
	5	6		0
	6	6		
	7	6		
9	8	6		
	9	6		
70	1	6		
	2	6		
	3	6		
	4	6		
	5	6		0
	6	6		
	7	6		
7	8	N		
	9	N		
80	1	3		
	2	6		
	3	6		
	4	6		
	5	6		91
	6	6		
	7	6		
8	8	6		
	9	6		
90	1	3		
	2	6		
	3	6		
	4	6		
	5	6		91
	6	N		
	7	6		
6	8	3 6		
	9	3		
100	1	6		
	2	6		
	3	6		
	4	6		
	5	6		0
	6	6		
	7	6		
9	8	6		
	9	6		

Secchi depth	1.3
Estimated?	No
# points ranked 4-6	85
total points assessed	99
% points ranked 4-6	86%

Check accompanying data collected at same site/date.	
Algal mat sample	X
Linear Veg Survey	X
Habitat Assessment	X
SCI/Biorecon 5 of 5	X
Water sample	X

RQ-202103-9-06

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

Curtis Mussen
3/8/21

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%.

SRIO: 81933 LIMS: 2229909 Macrophyte: 11796

Entered by: BS 4/21/21

QC ESB 5/21/2021

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

Waterbody: Alford Arm Tributary @ Miccosukee Rd | Date: 3/4/21 | County: Leon | Storet Number: 61WA0065

Analyst: Blake Spencer & Curtis Mixson | Signature:

Comments:

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	Meter Mark 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 vivi parous)											
Hydrilla verticillata											
Hydrocotle	X										
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				
>5 and ≤10% Macrophyte Coverage						X					
>10 and ≤25% Macrophyte Coverage					X		X		X	X	
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

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

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date:	3/8/2021	**Collected By:**	Curtis Musson, Blake Spencer
Customer:	WAS	**Sampling Agency:**	FDEP
RQ:	RQ-2021-03-08-06	**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: 2

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

Site Location	Field ID/WIN ID
Alford Arm Tributary At Miccosukee Rd.	G1WA0066

RELINQUISHED BY(SIGNATURE): Blake Spencer **DATE/TIME**: 3/9/21 0830

THIS SECTION TO BE COMPLETED BY LABORATORY

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

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: Exo #1 RQ- 2021-03-08-06 2021-03-08-05 Project: BMAP + SMP

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.	Blake Spencer	3/8/21	0653	19.8	769.0	9.20	9.25	101.7	–	1.1713	P / F	L / F
ICV	Blake Spencer	3/8/21	0659	19.9	769	9.20	9.36	102.9	–	–	P / F	L / F
CCV	Blake Spencer	3/8/21	1739	20.8	768.4	9.20	9.07	101.5	–	–	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.	Blake Spencer	3/8/21	0701	201209H	12/2021	1000	1000	P / F	L / F
ICV	Blake Spencer	3/8/21	0703	201209H	12/2021	1000	1000	P / F	L / F
CCV	Blake Spencer	3/8/21	1743	2911C93	11/2021	1000	102.1	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.	Blake Spencer	3/8/21	0706	200407R	10/21	7.02	19.90	7.02	-73.9	P / F	L / F
Calibr.	Blake Spencer	3/8/21	0708	201209E	6/22	4.00	19.90	4.00	156.6	P / F	L / F
Calibr.	Blake Spencer	3/8/21	0713	200407A	10/2021	10.06	20.1	10.06	-179.9	P / F	L / F
ICV	Blake Spencer	3/8/21	0715	200407A	10/2021	10.06	20.1	10.05	-181.1	P / F	L / F
CCV	Blake Spencer	3/8/21	1744	201209E	6/22	4.00	19.8	4.02	154.7	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 ± 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:

Cooler Packing Worksheet for Request: RQ-2021-03-08-06
Alford Arm RPS
Ship Cooler On: 3/4/2021
Customer/Project: WAS-SECT/SMP

Assigned To: MCCOY_I
Requester: Curtis Musson
Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:
Group A: Nutrients, Metals, Tracers, PSNPTQ, DIELDRIN, PCL, E. coli
Group B: Algal_ID, SCI

Packing Notes:
No FedEx Labesl
No Trash Bags
1 CA H2SO4
1 CA HNO3

Requested Analyses:

Bottle Group: A

# of Sites: 1

Container ID: P-1L **Qty: 1** **Preservation: ICE** **Lot #** 00 78839

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 #** 1299839

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 #** L2027S

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: 4** **Preservation: ICE** **Lot #** 00078534

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

Analysis	Description
W-DIELDRIN	Dieldrin (ultra low level) in water matrices by GC/MS/MS
W-PCL-SQ-R	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM

Container ID: BG-500ML **Qty: 1** **Preservation: ICE** **Lot #** 00078714

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 #** 00079262

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 #** 00079262

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 #** 00079474

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 #** 00078933

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 #** 430291

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 #** BioWash

Description: Plastic Jar 2 L

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

Cooler Packed By: IM Number of Coolers: 2 Date: 2/26/21

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

If Preservation Included:

ID	H2SO4 LOT# SA0353110 EXP: 01/11/2022	Exp	Lot #
ID		Exp	Lot #
ID		Exp	Lot #
I	HNO3 LOT# NA0344060 EXP: 01/04/2022	Exp	Lot #
I		Exp	Lot #

PLEASE RETURN ALL COOLERS FOR RQ-2021-03-08-06