FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

Data Qualified? Yes / No

Location/STORET Station Name: Wakulla At Boat Tram **Date:** 7/26/17 (mm/dd/yyyy)

STORET # 44059 **WBID:** 1006 **Latitude:** 30.23458 (Decimal Degrees)

County: Wakulla **RQ -** 2017-07-24-19 **ORG ID:** 21FLWQA **Longitude:** -84.29447 (Decimal Degrees)

Receiving Body of Water: St. Marks River **Field ID:** 44059_07262017

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson					
Ben Ralys		/		/	/
Robert Wiwi					

Sampling Equipment

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

Equipment ID

Collection Method

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

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

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

Matrix: (Fresh) / Marine / DI

Meter ID# Biology #2 **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)	9:28	0.3	1.4	2.77	31.2	7.11	0.15	VOB	312	21.19
CEN										

Biological Samples Collected: None (HA) (SCI) (RPS) (Algae ID) (LVS) LVI Other

SBIO ID Numbers: SBIO-ID: 77770 RPS-ID: 8725 Macrophyte-ID: 10570 LIMS#: 1916628

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	6209120	7/27/17	[ ] <2
Metals	[x] W-ICPMS [x] W-ICP	[x] Ice [x] HNO_3	6218060	8/5/17	[ ] <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			
Periphyton	[x] ALGAE-ID	[x] Ice			
Microbiology	[ ] E Coli [ ] F Coli [ ] Enterococci [ ] qPCR	[ ] Ice			
Tracers	[ ] W-SUC-AA-R [ ] W-UHERB-AA [ ] W-AHERB-AA	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PCL-SQ-R [ ] W-UHERB-AA [ ] W-GLYPH [ ] W-SUC-AA-R	[ ] Ice [ ] Other			

Contains 1:1 Nitric Acid NA-6218060 EXP: 08/05/17 Warning! See SDS

Contains 1:1 Sulfuric Acid SA-6209120 EXP: 07/27/17 Warning! See SDS

Notes:

Kit C
SCI
RPS/LVS

Wakulla at Boat Tram

STORET ↓ 44059

Field ID → Wakulla at Boat Tram July 26, 2017 44059_07262017

Signature: Date: 7/26/17

Field Parameters Entered into LIMS: CM 7-27-17 (Initials/Date) Field Parameters QC in LIMS: (Initials/Date)

Date Migrated to STORET: (Initials/Date) Field Sheets Scanned/Saved: DT 7/28/17 (Initials/Date)

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

SAMPLING AGENCY: Florida Department of Environmental Protection		STORET STATION NUMBER: 44059	DATE (MM/DD/YY): 7/26/17	RECEIVING BODY OF WATER: St. Marks River
REMARKS:	COUNTY: Wakulla	LOCATION: Wakulla at Bart Team		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components: Snag, Roots, Leaf, Rock, Aquatic Vegtation **Substrate Diversity** 7	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 20 730 %	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 20 0.6 m/s	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 (20) 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering 11 Primary Score 58	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 10 Left Bank 10 If Banks are PipeClay, BedRock or Concrete at Bank full: Optimal	Bankfull > 60% of bank height. Slope of bank ≤ 60° from 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~~ 9 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~~ 9 Left Bank 10 Secondary Score 78	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

136 **TOTAL SCORE**

Date: 7/26/17	Analyst: Curtis Mosson Ben Ralls	Signature:

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

Waterbody: Wakulla at Boat Tram | Date: 7/26/17 | County: Wakulla | Storet Number: 44059

Analyst: Ben Rabys | Signature: Ben Rabys

Comments: ~~SMP Sampling~~ CM BMAP 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	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											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata	X	X	X	X	X		X	X	X	X	
Cladium jamaicense						X	X				Rw
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Hydrilla verticillata	X	X	X	X	X	X				X	
Hydrocotle											
Hygrophila polysperma											
Hymenocallis							X				
Lachnanthes caroliniana											
Landoltia punctata											
Lemna	X	X	X	X	X	X	X	X	X	X	
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens			X	X	X	X	X	X	X	X	
Luziola fluitans											
Micranthemum glomeratum											
Micranthemum umbrosum											
Mikania scandens	X	X	X	X	X	X	X	X	X		
Myriophyllum aquaticum											
If no Dominant or Co-Dominant were selected, indicate with "X"											

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)
Myriophyllum heterophyllum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Peltandra virginica											
Pistia stratioides											
Polygonum glabra	X	X	X	X	X	X	X		X	X	Rw
Polygonum hydropiperoides	X	X	X		X	X	X		X	X	Rw
Polygonum punctatum											
Pontedaria cordata	X	X	X	X	X	X	X	X	X	X	
Potamogeton illinoensis											
Rhynchospora inundata	X	X	X	X	X	X	X	X	X	X	
Rosa palustris											
Ruellia simplex											
Rumex verticillatus											
Sacciolepis striata											
Sagittaria kurziana	X	X	X	X	X	X	X	X	X	X	
Sagittaria lancifolia											
Sagittaria latifolia		X		X	X	X	X	X			
Salvinia minima											
Samolus parviflora											
Saururus cernuus				X							
Scirpus (schenoplectus) californicus	X			X	X	X				X	
Sparganium americanum											
Typha				X	X						
Vallisneria americana Dom	X	X	X	X	X	X	X	X	X	X	
Zizania aquatica											

Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage											
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

Notes:
LIMS: 1916628
SBIO: 77770
RPS: 8725
Macrophyte: 10570

~~□ < 2m2~~

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Wakulla At Boat Tram | County: Wakulla | Date: 7/26/17 | Investigators: Robert Wini, Curtis Musson, Ben Rabs

STORET Station Number: 44059

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

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

Secchi depth	vob
Estimated?	No
# points ranked 4-6	35
total points assessed	76
% points ranked 4-6	35
(Exclude X's)	46%

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

RQ- 2017-07-24-19

Algal Thickness Rank	
N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

(> 3 considered smothered)

LIMS: 1916628
SBIO: 77770
TEPS: 8725
Macrophyte: 10570

(N to 1 mm)
(3) 6mm
(4) 20mm
cm
(5) 10cm
(6)

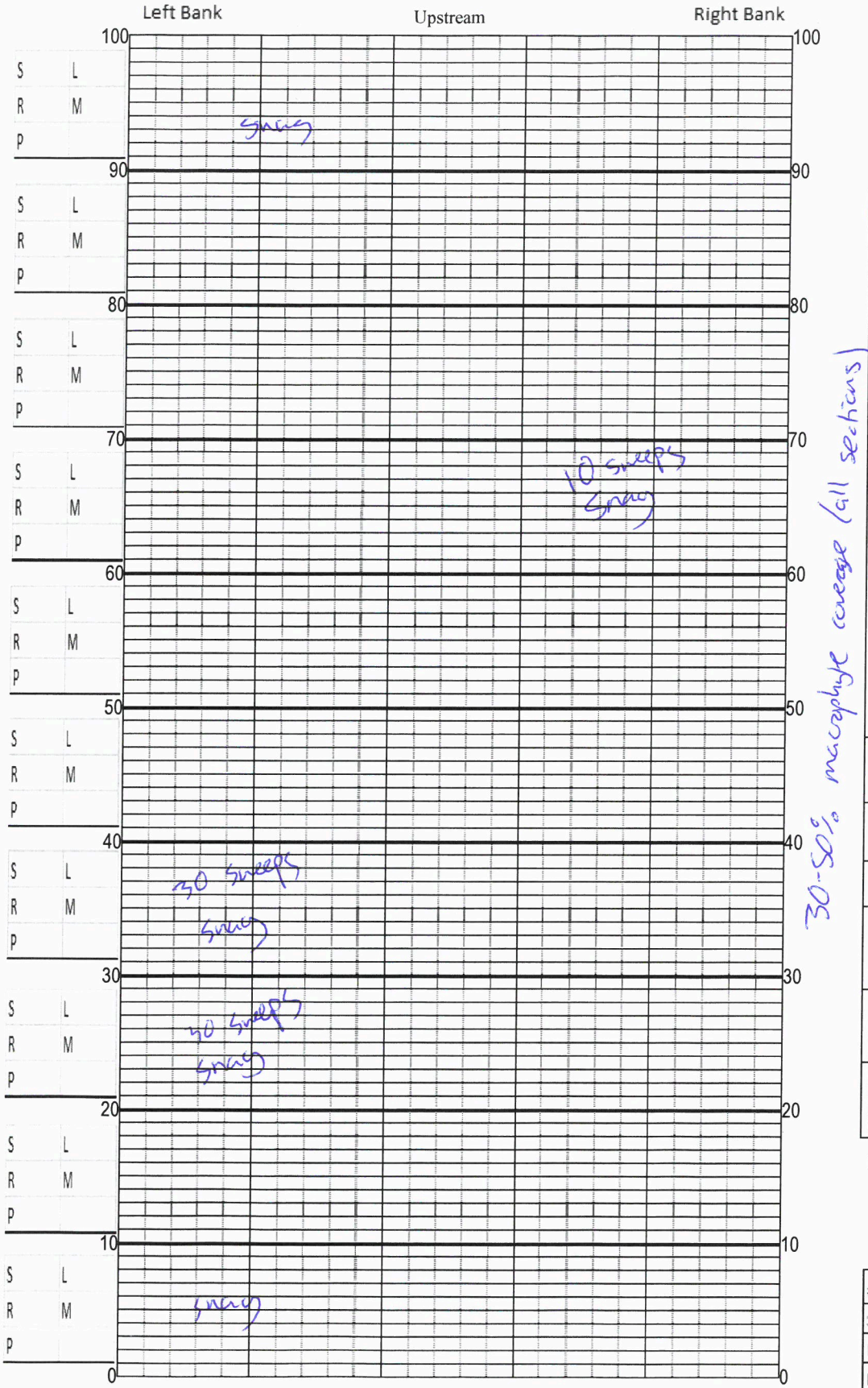
Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.

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 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Wakulla at Boat Tram

Date: 7/26/17

Sampler: Curtis Musson Robert W.W.

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.

		%
S	Snags	1
R	Roots/undercut banks	0
L	Leaf Packs (or mats)	0
M	Aquatic Macrophytes	30-50%
Rc	Rock	0
P	Pools	total # observed = 1
		# range expected = <1

Average width 85 m

Average depth 1.4 m

Velocity measured at 50 meter mark.

Velocity 0.6 m/s

WQ & chemistry taken at 50 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	

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

~~Kindly "X" the box where is qualified on this page.~~

Meter: Biology #2 RQ-: 2017-07-24-19 Project: BMAP

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 03/06/2017

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	7/26/17 25 cm	1652	23.24	8.546	8.54	100.0	39	—	P	Lab
ICV	Curtis Musson	7/26/17 25 cm	1653	23.20	8.546	8.54	99.9	39	—	P	Lab
CCV	~~Curtis Musson~~ Robert Wim	7/26/17	13:42	26.91	7.983	7.74	97.0	38.0	—	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	7/26/17 25 cm	1635	1703101)	03/2018	1000	1000	P	Lab
ICV	Curtis Musson	7/26/17 25 cm	1637	1703101)	03/2018	1000	1000	P	Lab
CCV	~~Curtis Musson~~ Robert Wim	7/26/17	13:44	~~1703101)~~ 1706141)	6/18	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 7/25/17 cm	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Musson	7/26/17 25 cm	1656	1703103	09/2018	7.0	6.99	-15	P	Lab
Calibr.	Curtis Musson	7/26/17 25 cm	1658	1703104	03/2018	4.01	4.01	165	P	Lab
Calibr.	Curtis Musson	7/26/17 25 cm	1700	161111C	05/2018	10.01	9.95	-166	P	Lab
ICV	Curtis Musson	7/26/17 25 cm	1703	161111C	05/2018	10.01	9.92	-164	P	Lab
CCV	~~Curtis Musson~~ Robert Wim	7/26/17	13:46	170310A	3/18	4.01	3.55	187.5	F	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: 2017-07-24-19
Wakulla River
Customer: WQ-ASSESS
Project ID: BMAP

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Lab Sample Submittal Form

Requester: Curtis Musson
Collected By: Curtis Musson, Robert Wilwi, Ben Ralys
Field Report Prepared By: ____
Sampling Agency: FDEP

Location: Wakulla at Boat Tram
STORET 44059
Field ID → Wakulla at Boat Tram
July 26, 2017
44059 07262017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 7/26/17 Time 9:28 (Eastern / Central)	Collection (comp begin or grab) Date — Time —		Bottle Group(s)
Matrix (Salt, Fresh): Fresh	Diss. Oxygen (mg/L): 2.77			
Temp (C): 21.19	pH: 7.11	Sample Depts (m): 0.3	Sp. Conductance (umho/cm): 312	A, B
Salinity (ppt): 0.15	Comments:			
Latitude (Decimal Degrees): 30.23458		Longitude (Decimal Degrees): -84.29447		

Location: Wakulla River at CR365
STORET 34879
Field ID → Wakulla River at CR365
July 26, 2017
34879_07262017

☐ Comp ☒ Grab	Collection (comp begin or grab) Date 7/26/17 Time 11:50 (Eastern / Central)	Collection (comp begin or grab) Date — Time —		Bottle Group(s)
Matrix (Salt, Fresh): Fresh	Diss. Oxygen (mg/L): 4.80			
Temp (C): 21.87	pH: 5.87	Sample Depts (m): 0.3	Sp. Conductance (umho/cm): 316	A, B
Salinity (ppt): 0.15	Comments:			
Latitude (Decimal Degrees): 30.21373		Longitude (Decimal Degrees): -84.26163		

Location:
Field ID:
STORET #:

☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time (Eastern / Central)	Collection (comp begin or grab) Date Time		Bottle Group(s)
Matrix (Salt, Fresh):	Diss. Oxygen (mg/L):			
Temp (C):	pH:	Sample Depts (m):	Sp. Conductance (umho/cm):	
Salinity (ppt):	Comments:			
Latitude (Decimal Degrees):		Longitude (Decimal Degrees):		

Relinquished By:	Date/Time	Number of Coolers	Received By:	Date/Time
	7/26/17 13:25	1		7/26/17 13:25

Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab** 2
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS					
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab** 2
	CHLSUITE-W					
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	**Enter Number of Bottles Sent to Lab** 2
	W-ICP W-ICPMS					
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab** 2
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	ICE-FLTR	**Enter Number of Bottles Sent to Lab** 2
	W-PO4-F					
Group: B	Bottle Type:	PT-50ML	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab** 2
	ALGAL_ID					
Group: B	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	**Enter Number of Bottles Sent to Lab** 2 OF 4
	MI-FW-QLDC					

1 OF 2 SETS

Cooler Packing Worksheet for Request: RQ-2017-07-24-19
Wakulla BMAP
Ship Cooler On: 7/14/2017
Customer/Project: WAS-SECT/BMAP

Assigned To: REYNOLDS_T
Requester: Curtis Musson
Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:
No preservatives needed.

Group A: Freshwater Kit With Metals
Group B: SCI, Algae_ID

Packing Notes
No FedEx labels needed

Requested Analyses:

Bottle Group: A # of Sites: 2

Container ID: P-1L **Qty: 2** **Preservation: ICE** **Lot #** 0006,8075

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-SO4-IC	Sulfate in aqueous matrices
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices

Container ID: BP-1L **Qty: 2** **Preservation: ICE** **Lot #** 1199138

Description: Brown Plastic Bottle 1L

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

Cooler Packed By: Tyler R. Number of Coolers: 2 Date: 07/14/17

Kit must also include:
- ✓ Field Sheets
- ✓ Temperature Control Bottle
- ✓ FedEx Bills, if applicable
- ✓ Plastic Bags
- ✓ Zip Ties

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2017-07-24-19