



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

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Data Qualified?
Yes ☐ No ☒

STORET Station Name: Ochlockonee River Downstream of Whitehead Lake Campground

Date: 7/6/2016

(mm/dd/yyyy)

STORET Station ID: G1WA0029

WBID: 1297A

Latitude: 30.15386

(Decimal Degrees)

County: Wakulla/Liberty RQ - 2016-07-04-30

ORG ID: 21FLWQA

Longitude: -84.67056

(Decimal Degrees)

Receiving Body of Water: Gulf Of Mexico

Field ID: G1WA0029

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Ben Ralys				☒	☒	☒	☒	☒	☐ Sample Container	☐ Van Dorn	☐ Pole	
Justin Wallheiser				☒	☒	☒	☒	☒	☐ Carboy	☒ Syringe	☐ Other	
				☐	☐	☐	☐	☐	☐ Dipper	☐	☐	
				☐	☐	☐	☐	☐	Equipment ID			
				☐	☐	☐	☐	☐	Collection Method			
				☐	☐	☐	☐	☐	☐ Wading	Via Boat		
				☐	☐	☐	☐	☐	☐ From Shore	☐ Canoe/Kayak	☐ Electric Motor	
				☐	☐	☐	☐	☐	☐ Other (note below)	☒ Gasoline Motor		
Water Level: Dry / Low / <u>Normal</u> / High / Flooded				Matrix: <u>Fresh</u> / Marine / DI				Tide Falling: Yes / No / <u>NA</u>				
Meter ID# <u>Biology 2</u>				Photos: Yes / <u>No</u>								
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	9:45	0.3	4.35	4.88	62.0	6.41	0.02	0.6	54	27.68		
CEN	9:50	4.15		4.83	61.4	6.41	0.02		54	27.68		
Biological Samples Collected: None HA SCI <u>LVS</u> <u>RPS</u> LVI Other												
Parameter Suite		Parameter Methods				Preservation		Acid Lot#		Expiration	pH Check	
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4		5259020		9/16/16	☒ <2	
Metals		☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO2		5259030		9/16/16	☒ <2	
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☐ Ice						
Chlorophyll		☒ CHLSUITE-W				☐ Ice						
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☐ Ice						
Physical/Aggregate (Marine)		☐ Alkalinity / W-F / W-TSS / TURBIDITY				☐ Ice						
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin						
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR				☐ Ice						
Periphyton		☐ ALGAE-ID				☐ Ice						
Pesticides		☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R				☐ Ice						
		☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH				☐ Other						

Contains 1:1 Nitric Acid NA-5259030 EXP: 09/16/16 Warning! See MSDS

Contains 1:1 Sulfuric Acid SA-5259020 EXP: 09/16/16 Warning! See MSDS

Notes:

SBI0:76448

RPS: 8191

MacroPhyte <2m²

Signature: B. R.

Date: 7/6/16

Field Parameters Entered into LIMS: CM 7-7-2016

(Initials/Date)

Field Parameters QC in LIMS:

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved: CM 7-8-2016

(Initials/Date)

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

Waterbody: Ochlockonee River Date: 7/6/16 County: Wakulla Storet Number: G-14A0029
Analyst: Ben Roberts Signature: Ben Roberts

Comments: SMP Sampling

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
Alternanthera philoxeroides												Myriophyllum heterophyllum											
Bacopa caroliniana												Najas guadelupensis											
Bacopa monnieri												Nuphar luteum											
Bidens mitis												Orontium aquaticum											
Boehmeria cylindrica												Panicum hemitomon											
Centella asiatica												Panicum repens											
Ceratophyllum demersum												Panicum rigidulum											
Chara												Pistia stratioides											
Cicuta maculata												Polygonum glabra											
Cladium jamaicense												Polygonum hydropiperoides											
Colocasia esculenta												Polygonum punctatum											
Commelina diffusa												Pontedaria cordata											
Commelina virginica												Potamogeton illinoensis											
Crinum americanum												Rhynchospora inundata											
Diodia virginiana												Rosa palustris											
Eichhornia crassipes												Ruellia simplex											
Eleocharis (wispy viviparous)												Rumex verticillatus											
Hydrilla verticillata												Sacciolepis striata											
Hydrocotyle												Sagittaria kurziana											
Hygrophila polysperma												Sagittaria lancifolia											
Hymenocallis												Sagittaria latifolia											
Lachnanthes caroliniana												Salvinia minima											
Landoltia punctata												Samolus parviflora											
Lemna												Saururus cernuus											
Limnophila sessiflora												Scirpus (schenoplectus) californicus											
Ludwigia leptocarpa												Sparganium americanum											
Ludwigia palustris												Typha											
Ludwigia peruviana												Vallisneria americana											
Ludwigia repens												Zizania aquatica											
Luziola fluitans																							
Micranthemum glomeratum																							
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																							
>5 and ≤10% Macrophyte Coverage																							
>10 and ≤25% Macrophyte Coverage																							
>25 and ≤50% Macrophyte Coverage																							
> 50% Macrophyte Coverage																							

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Black River downstream of Whithead Lake campground County: Waukegan Date: 7/6/16 Investigators: Be Ralyn, Justin Wallhagen

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	X	Y		60	1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n				5	n		
	6	n		0		6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		
10	1	X			70	1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n		0		5	n		
	6	n				6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		
20	1	X			80	1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n		0		5	n		
	6	n				6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		
30	1	X			90	1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n		0		5	n		
	6	n				6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		
40	1	X			100	1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n		0		5	n		
	6	n				6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		
50	1	X				1	X		
	2	X				2	X		
	3	n				3	n		
	4	n				4	n		
	5	n		0		5	n		
	6	n				6	n		
	7	n				7	n		
	8	X				8	X		
	9	X				9	X		

STORET Station Number:

CJWA0029

Secchi depth 0.6
Estimated? N

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 Yes
Habitat Assessment —
SCI/Biorecon —
Water sample Yes

RQ- 2016-07-04-30

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

SBTO: 76448

PPS: 8191

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%.

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 **Biology #2**

RQ- **2016-07-04-30**

Project **SMP**

- 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.	Ben Ralys	7/6/16	7:30	22.33	8.693	8.69	100.0	49.2	-	P	Lab
ICV	Ben Ralys	7/6/16	7:31	22.38	8.693	8.67	99.9	49.2	-	P	Lab
CCV	Susan Wallhiser	7/6/16	15:47	29.91	7.522	7.53	99.4	51.2	-	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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Ralys	7/6/16	7:34	160330D	4/2017	1,000	1,000	P	Lab
ICV	Ben Ralys	7/6/16	7:35	160330D	4/2017	1,000	1,000	P	Lab
CCV	Susan Wallhiser	7/6/16	15:48	260533	12/2017	100	98	P	Lab
CCV									

Report specific conductance as a whole number with no decimal figure.

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Ben Ralys	7/6/16	7:38	160330B	10/2017	7.0	7.0	-19.2	P	Lab
Calibr.	Ben Ralys	7/6/16	7:42	160330A	4/2017	4.0	4.0	-159.5	P	Lab
Calibr.	Ben Ralys	7/6/16	7:45	160330C	10/2017	10.0	9.98	-189.5	P	Lab
ICV	Ben Ralys	7/6/16	7:47	160330C	10/2017	10.0	9.97	-189.4	P	Lab
CCV	Susan Wallhiser	7/6/16	15:49	160330A	4/2017	4.0	3.92	-163.4	P	Lab
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU;

mV pH7 Range 0 ± 50 ;

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

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 $\pm 5\%$ or ± 0.05 m, whichever is greater

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: WQAP

Requester: Benjamin Ralys

Project ID: SMP

Collected By:

Ren Peltz & Justin Walther

Field Report Prepared By:

Justin Walther

Sampling Agency:

FDEP

Location		Ochlocknee River downstream of Highway 160/161		Collection (comp begin or grab)		Date		Time		Eastern		Composite end		Date		Time		Bottle Group(s)	
Field ID		G1WA0029		Matrix (type, e.g., Salt, Fresh, etc)		Fresh		9:45		Central		mg/L Total Res. Chlorine		mg/L Total Res. Chlorine		—		(See pg 2)	
STORET #		G1WA0029		Temp (C)		22.68		pH		6.41		Sample Depth		0.3		ft		A	
Latitude		30.15386		Longitude		-84.67056		Salinity (ppt)		0.02		Comments							
Location		Ochlocknee River upstream of Tule Creek		Collection (comp begin or grab)		Date		Time		Eastern		Composite end		Date		Time		Bottle Group(s)	
Field ID		G1WA0030		Matrix (type, e.g., Salt, Fresh, etc)		Fresh		11:05		Central		mg/L Total Res. Chlorine		mg/L Total Res. Chlorine		—		A	
STORET #		G1WA0030		Temp (C)		28.72		pH		6.54		Sample Depth		0.3		ft		A	
Latitude		30.26643		Longitude		-84.73555		Salinity (ppt)		0.03		Comments							
Location		Ochlocknee River upstream of SR 12		Collection (comp begin or grab)		Date		Time		Eastern		Composite end		Date		Time		Bottle Group(s)	
Field ID		G1WA0038		Matrix (type, e.g., Salt, Fresh, etc)		Fresh		13:00		Central		mg/L Total Res. Chlorine		mg/L Total Res. Chlorine		—		A	
STORET #		G1WA0038		Temp (C)		24.06		pH		6.87		Sample Depth		0.3		ft		A	
Latitude		30.69062		Longitude		-84.20511		Salinity (ppt)		0.04		Comments							
Location		Ochlocknee River 300m upstream of SR 12		Collection (comp begin or grab)		Date		Time		Eastern		Composite end		Date		Time		Bottle Group(s)	
Field ID		G1WA0042		Matrix (type, e.g., Salt, Fresh, etc)		Fresh		14:05		Central		mg/L Total Res. Chlorine		mg/L Total Res. Chlorine		—		A	
STORET #		G1WA0042		Temp (C)		29.10		pH		6.85		Sample Depth		0.3		ft		A	
Latitude		30.6922		Longitude		-84.2046		Salinity (ppt)		0.04		Comments							

Relinquished By:

Date/Time

Shipping Method

Number of Coolers Shipped:

Received By:

Date/Time

Sst. Walther

7/6/2016/1530

By hand

FLW

7/6/16/1530

Cooler Packing Worksheet for Request: RQ-2016-07-04-30

Ochlockonee River

Ship Cooler On: 6/20/2016

Customer/Project: WQAP/SMP

Requester: Benjamin Ralys

Priority: 3

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

Comments:

Bottle Group A: Freshwater chemistry including metals

Bottle Group B: Algal ID

1 - case of Nitric Acid

1 - case of Sulfuric Acid

Requested Analyses:

Bottle Group: A

of Sites: 4

Container ID: P-1L

Qty: 4 Preservation: ICE

Lot # 00064935

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO₃/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: BP-1L

Qty: 4 Preservation: ICE

Lot # 1172350

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry

Container ID: P-500ML

Qty: 4 Preservation: HNO3

Lot # 00064521

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-ICP

W-ICPMS

Description

Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Container ID: P-500ML

Qty: 4 Preservation: ICE And H2SO4

Lot # 00064521

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3

W-NO2NO3

W-S-A-TP

W-TKN

W-TOC

Description

Ammonia in aqueous matrices as mg N/L

Nitrite/Nitrate in aqueous matrices as mg N/L

Total Phosphorus in aqueous matrices as mg P/L

Total Kjeldahl Nitrogen in aqueous matrices

Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML

Qty: 4 Preservation: ICE-FLTR

Lot # 00064846

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Bottle Group: B

of Sites: 4

Container ID: PT-50ML

Qty: 4 Preservation: ICE

Lot # 430897

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Cooler Packed By: SK Date: 6-20-16
DEP Cooler ID #(s): 2 Coolers

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	<u>Nitric Acid</u>	exp: <u>9-16-16</u>	Lot #	<u>NA5259030</u>
ID	<u>Sulfuric Acid</u>		Lot #	<u>3A6133010</u>
ID	<u>exp: 5-12-17</u>		Lot #	
ID			Lot #	

PLEASE RETURN ALL COOLERS FOR RQ-2016-07-04-30