FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified? Yes / (No)

WIN Station Name: Merritt's Mill Pond 500 meters upstream of dam **Date:** 3/14/018 (mm/dd/yyyy)

WIN/ Field ID: G2WA0009 **WBID:** 180A **Latitude:** 30.755 (Decimal Degrees)

County: Jackson **ORG ID:** 21FLWQA **Longitude:** -85.1881 (Decimal Degrees)

Receiving Body of Water: Chipola River **RQ-2018-** 03-12-52

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Curtis Musson		X		X	X
Blake Spencer	X		X		

Sampling Equipment
- [x] Sample Container [ ] Van Dorn [ ] Pole
- [ ] Carboy [x] Syringe
- [ ] Dipper [ ] Other
- Depth Measured with Sonar #1
- Equipment ID

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

Water Level: Dry/ Pooled/ Low /(Normal)/ High / Flooded **Meter ID#** Biology #2 **Matrix:** (Fresh)/ Marine / DI

Photos: (Yes) / No **Flow:** No Flow / Intestital / Flowing /(NA) **Tide:** Rising/ Falling/ Slack/ NA **Tide Times:** High NA Low NA

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
EST	0913	2.4	0.3	VOB	12.75	132.1	8.22	0.13	266	17.25
CEN	0919		2.1		13.00	135.1	8.27	0.13	263	17.19

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

SBIO ID Numbers: SBIO-ID: 78279 HA-ID: RPS-ID: 8936 Macrophyte-ID: **LIMS#:** 1974863

Parameter Suite	Parameter Methods	Preservation	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	SA7341020	12/7/18	[x] <2
Metals	[x] W-ICPMS [x] W-ICP	[x] Ice [x] HNO_3	NA7261120	9/18/18	[x] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice	10827054		
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	[ ] MI-FW-QLDC	[ ] Formalin			
Periphyton	[x] ALGAE-ID	[x] Ice			
Microbiology	[ ] E Coli [ ] F Coli [ ] Enterococci	[ ] Ice			
Molecular	[ ] PCR-FILTER [ ] PCR-HF183 [ ] PCR-BacR [ ] PCR-GULL2 [ ] PCR-GFD	[ ] Ice			
Tracers	[ ] W-SUC-AA-R [ ] W-UHERB-AA [ ] W-AHERB-AA	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-UHERB-AA [ ] W-AHERB-AA [ ] W-CARB-AA [ ] W-PCL-SQ-R [ ] W-PYR-AA-R [ ] W-GLYPH [ ] W-SUC-AA-R	[ ] Ice [ ] Other			

Contains: 1:1 H2S04
Lot No.: SA7341020
Expires: 12/07/18
See Safety Data Sheet (SDS)

1:1 Nitric Acid NA – 7261120 EXP: 09/18/18 See SDS

SULFURIC ACID <51% DANGER 7664-93-9 7732-18-5

Notes:

Kit-C
RPS

Merritt's Mill Pond
500 meters
upstream of dam

WIN/Field ID
G2WA0009

Signature: **Date:** 3/14/18

Enter Field Parameters, Verify Station ID In LIMS DMT: BAL 3/15/18 (Initials/Date) QC Station ID, Field Parameters In LIMS DMT: CM 4/10/18 (Initials/Date)

Scan/Save Field Sheets CM 4/10/18 (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)

SBIO ID: 78279 RPS ID: 8936

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:	County:	Date:	Investigators:
Merritt's Mill Pond, 500m upstream of Dam	Jackson	3/14/2018	Blake Spencer & Curtis Musson

STORET Station Number: G2WA0009

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

(N to 1 mm)

Secchi depth	0.3
Estimated?	No

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

(Exclude X's)

Check accompanying data collected at same site/date.	
Algal mat sample	Y
Linear Veg Survey	No
Habitat Assessment	No
SCI/Biorecon	No
Water sample	Yes

RQ- 2018-03-12-S2

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)

(3) 6mm

(4) 20mm

(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%.

Entered by: Blake Spencer 3/15/18

QC Cm 4/10/18

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 ID: Biology #2 **RQ-** **Project:** Merritts Mill Pond BMAP

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.

Circle/Fill In: (Lab Calibration) or Calibration/Verification on Site _____

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

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.	Blake Spencer	3/14/18	0701	20.92	8.932	8.93	100.0	55.3		(P) / F	(L) / F
ICV	Blake Spencer	3/14/18	0703	20.88	8.932	8.94	100.0	55.3		(P) / F	(L) / F
CCV	Blake Spencer	3/14/18	1445	21.00	8.915	9.05	101.5	53.3		(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; 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	3/14/18	0706	171005D	10/2018	1000	1000	(P) / F	(L) / F
ICV	Blake Spencer	3/14/18	0708	171005D	10/2018	1000	999	(P) / F	(L) / F
CCV	Blake Spencer	3/14/18	1447	171005E	10/2018	100	101	(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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Blake Spencer	3/14/18	0710	171005B	04/2019	7.0	7.00	0.7	(P) / F	(L) / F
Calibr.	Blake Spencer	3/14/18	0721	171005A	10/2018	4.0	4.00	174.6	(P) / F	(L) / F
Calibr.	Blake Spencer	3/14/18	0724	171005C	04/2019	10.0	10.00	~~164.3~~ 10.00	(P) / F	(L) / F
ICV	Blake Spencer	3/14/18	0726	171005C	04/2019	10.0	10.00 9.97	~~164.3~~	(P) / F	(L) / F
CCV	Blake Spencer	3/14/18	1449	171005B	04/2019	7.0	6.99	3.9	(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)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth 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:

Request Number: RQ-2018-03-12-52

Merrits Mill Pond BMAP

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WAS-SECT

Project ID: BMAP

Requester: Curtis Musson

Collected By: Curtis Musson

Field Report Prepared By: Curtis Musson

Sampling Agency: FDEP

Location: Merritt's Mill Pond 500 meters upstream of dam

WIN/Field ID: Q2WA0009

Field ID:

WIN/STORET #:

Latitude: ☐ dd ☐ dms

Longitude: ☐ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 3-14-18 Time 0913 | Eastern / ~~Central~~ | Composite end Date / Time /

Bottle Group(s) (See pg 2): A, B

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen: 132.1 ☐ mg/L ☒ % sat

Total Res. Chlorine (mg/L): —

Temp (C): 17.25

pH: 8.22

Sample Depth: 0.3 ☐ ft ☒ m

Sp. Conductance (umho/cm): 266

Salinity (ppt): 0.13

Comments:

Location: Merritt's Mill Pond mid under powerlines

WIN ID/Field ID: Q1WA0008

Field ID:

WIN/STORET #:

Latitude: ☐ dd ☐ dms

Longitude: ☐ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 3-14-18 Time 1041 | Eastern / ~~Central~~ | Composite end Date / Time /

Bottle Group(s): A

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen: 119.8 ☐ mg/L ☒ % sat

Total Res. Chlorine (mg/L): —

Temp (C): 17.71

pH: 8.27

Sample Depth: 0.3 ☐ ft ☒ m

Sp. Conductance (umho/cm): 277

Salinity (ppt): 0.13

Comments:

Location: Merritt's Mill Pond 600 meters downstream of Jackson Blue Spring

WIN ID/ Field ID: Q2WA0007

Field ID:

WIN/STORET #:

Latitude: ☐ dd ☐ dms

Longitude: ☐ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 3-14-2018 Time 1107 | Eastern / ~~Central~~ | Composite end Date / Time /

Bottle Group(s): A, B

Matrix (type, e.g., Salt, Fresh, etc): Fresh

Diss. Oxygen: 99.9 ☐ mg/L ☒ % sat

Total Res. Chlorine (mg/L): —

Temp (C): 20.33

pH: 7.89

Sample Depth: 0.3 ☐ ft ☒ m

Sp. Conductance (umho/cm): 278

Salinity (ppt): 0.13

Comments:

Location:

Field ID:

WIN/STORET #:

Latitude: ☐ dd ☐ dms

Longitude: ☐ dd ☐ dms

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern / Central | Composite end Date Time

Bottle Group(s):

Matrix (type, e.g., Salt, Fresh, etc):

Diss. Oxygen: ☐ mg/L ☐ % sat

Total Res. Chlorine (mg/L):

Temp (C):

pH:

Sample Depth: ☐ ft ☐ m

Sp. Conductance (umho/cm):

Salinity (ppt):

Comments:

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Curtis Musson	3-14-2018 / 14:20	Drop off	1	AB	3-14-18 / 14:25

Group: A	Bottle Type: P-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS					
Group: A	Bottle Type: BP-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	3
	CHLSUITE-W					
Group: A	Bottle Type: P-500ML	# of Bottles: 3	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	3
	W-ICP W-ICPMS					
Group: A	Bottle Type: P-500ML	# of Bottles: 3	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	3
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: A	Bottle Type: P-125ML	# of Bottles: 3	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	3
	W-PO4-F					
Group: B	Bottle Type: PT-50ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ALGAL_ID					

Cooler Packing Worksheet for Request: RQ-2018-03-12-52
Merrits Mill Pond BMAP
Ship Cooler On: 3/8/2018
Customer/Project: WAS-SECT/BMAP

Assigned To: GREENWOO_J
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: Algal ID

Requested Analyses:

Bottle Group: A # of Sites: 3

Container ID: P-1L **Qty: 3** **Preservation: ICE** **Lot #** 0070298

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: 3** **Preservation: ICE** **Lot #** 1214297

Description: Brown Plastic Bottle 1L

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

Container ID: P-500ML **Qty: 3** **Preservation: HNO3** **Lot #** 00070440

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

Analysis	Description
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: 3** **Preservation: ICE And H2SO4** **Lot #** 00070440

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: FILTER-ICE** **Lot #** 00069595

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: 2

Container ID: PT-50ML **Qty: 2** **Preservation: ICE** **Lot #** 03775003

Description: Plastic Tube 50 mL

Analysis	Description
ALGAL_ID	Qualitative assessment of algal taxa present without counts

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Cooler Packed By: J.D. Number of Coolers: 1 Date: 3/5/18

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-2018-03-12-52