



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Lloyd Creek At Old Lloyd Rd.

Date: 3/9/2020

(mm/dd/yyyy)

WIN/ Field ID: G1WA0099 CM 22030061

WBID: 791A

Latitude: 30.476871

(Decimal Degrees)

County: Jefferson

ORG ID: 21FLWQA

Longitude: -84.006786

(Decimal Degrees)

Receiving Body of Water: Lloyd Creek Sink

RQ-2020- U2-24-17

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

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
☒ Syringe	☐ Pole
☐ Dipper	☐ Other
Depth Measured with <u>Water Stick</u>	
Equipment ID	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low <u>Normal</u> / High / Flooded		Meter ID# <u>Biology #2</u>	
Photos: <u>Yes</u> / No	Flow: No Flow / <u>Flowing</u> / NA	Tide: Rising/ Falling/ Slack/ <u>NA</u>	Tide Times: High <u>NA</u> Low <u>NA</u>
Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>RPS</u> Algae ID <u>LVS</u> LVI Other:			
SBIO ID Numbers:	SBIO-ID: <u>80829</u>	HA-ID: <u>16557</u>	RPS-ID: <u>9551</u>
Macrophyte-ID: <u>< 2m²</u>		LIMS#: <u>2163204</u>	
Notes:			

Duplicate Sample	
Time Zone: <u>EST</u> <u>CEN</u> Time: _____	Field ID: _____ (WIN ID_DUP)
WIN DMT Activity ID: _____	

Blank	
Time Zone: <u>EST</u> <u>CEN</u> Time: _____	Field ID: _____ (Blank Type_DDMYYYY)
DI Source: _____	Location: _____
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank	Equipment ID: _____

LIMS EVENT ID: WAS-SECT-2020-03-09-01 WIN Import ID: _____

Enter Field Parameters, Verify Station ID in LIMS DMT: 3/16/2020 (Initials/Date) QC Station ID, Field Parameters in LIMS DMT: CM 3-23-2020 (Initials/Date)

Scan/Save Field Sheets CM 3-23-2020 (Initials/Date) Migrate Data to WIN: _____ (Initials/Date) Verify Data in WIN: _____ (Initials/Date)



RQ-2020- 02-24-17
Customer: WAS-SECT
Project ID: SCI-BNCHMK

Lab Page _____ of _____
Collected By: Blake Spencer, Curtis Musson, Ben Relys
Field Report Prepared By: Blake Spencer
Sampling Agency: FDEP

Location: Lloyd Creek At Old Lloyd Rd

WIN ID/Field ID:



G1WA0099

22030061

SULFURIC
ACID <51%
DANGER
7504-03-8
7720-19-5
Contains: 1.1 H2SO4

MAY BE CORROSIVE TO METALS. Causes severe skin burns and eye damage. Do not breathe fumes/mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/soak off water-soaked. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. If present and easy to do, remove contact lenses. If present and easy to do, continue rinsing. Store locked up. Store in corrosion resistant container with a resistant inner liner.

Contains: 1.1 H2SO4
Lot No: SA9203100
Expires: 07/22/20
See Safety Data Sheet (SDS)

NITRIC ACID
20-70%
DANGER
7807-47-2
7720-19-5
Contains: 1.1 HNO3

MAY BE HIGHLY FLAMMABLE. May be corrosive to metals. Causes severe skin burns and eye damage. Keep away from heat/open flames. No smoking. Do not breathe fumes/vapors. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/soak off water-soaked. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. If present and easy to do, remove contact lenses. If present and easy to do, continue rinsing. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Corrosive to the respiratory tract.

Contains: 1.1 HNO3
Lot No: NA9180980
Expires: 07/08/20
See Safety Data Sheet (SDS)

Matrix: (Fresh) Marine

(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 (PPT)
3/9/20	9:20	9.94	95.4	13.50	6.84	0.15		0.3	66	0.03
EST / CST										
☒ VOB (S)										

Central Lab please use top row for login purposes

EST / CST

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 ☒ H2SO4*	☒ <2	1	A
	Lot # SA9203100 Exp: 07/22/20				
Metals (P-500ML)	☒ W-ICPMS ☐ W-ICP ☐ W-HARD	☒ Ice ☒ HNO3*	☒ <2	1	A
	Lot # NA9189080 Exp: 07/08/20				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 16803885 Syringe Lot # 8054813				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / 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		3	B
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci	☐ Ice		1	A
	☐ Contract Lab				
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes	☐ Ice			
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☐ Ice		1	A
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS ☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice		4	A

Name:

Blake Spencer

Signature:

Blake Spencer

Date:

3/9/2020

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

Entered by: ~~AM~~ 3/15/20

QC: CM 3/23/20

SIB: 80829

22030081

SAMPLING AGENCY: <u>FAEP/WAS</u>		STORET STATION NUMBER: <u>GIWA0099 CM</u>	DATE (MM/DD/YY): <u>3/9/2020</u>	RECEIVING BODY OF WATER: <u>Lloyd Creek Sink</u>
REMARKS: <u>HA: 16557</u>	COUNTY: <u>Jefferson</u>	LOCATION: <u>Lloyd Creek @ Old Lloyd Rd.</u>	FIELD ID/NAME: <u>GIWA0099</u>	

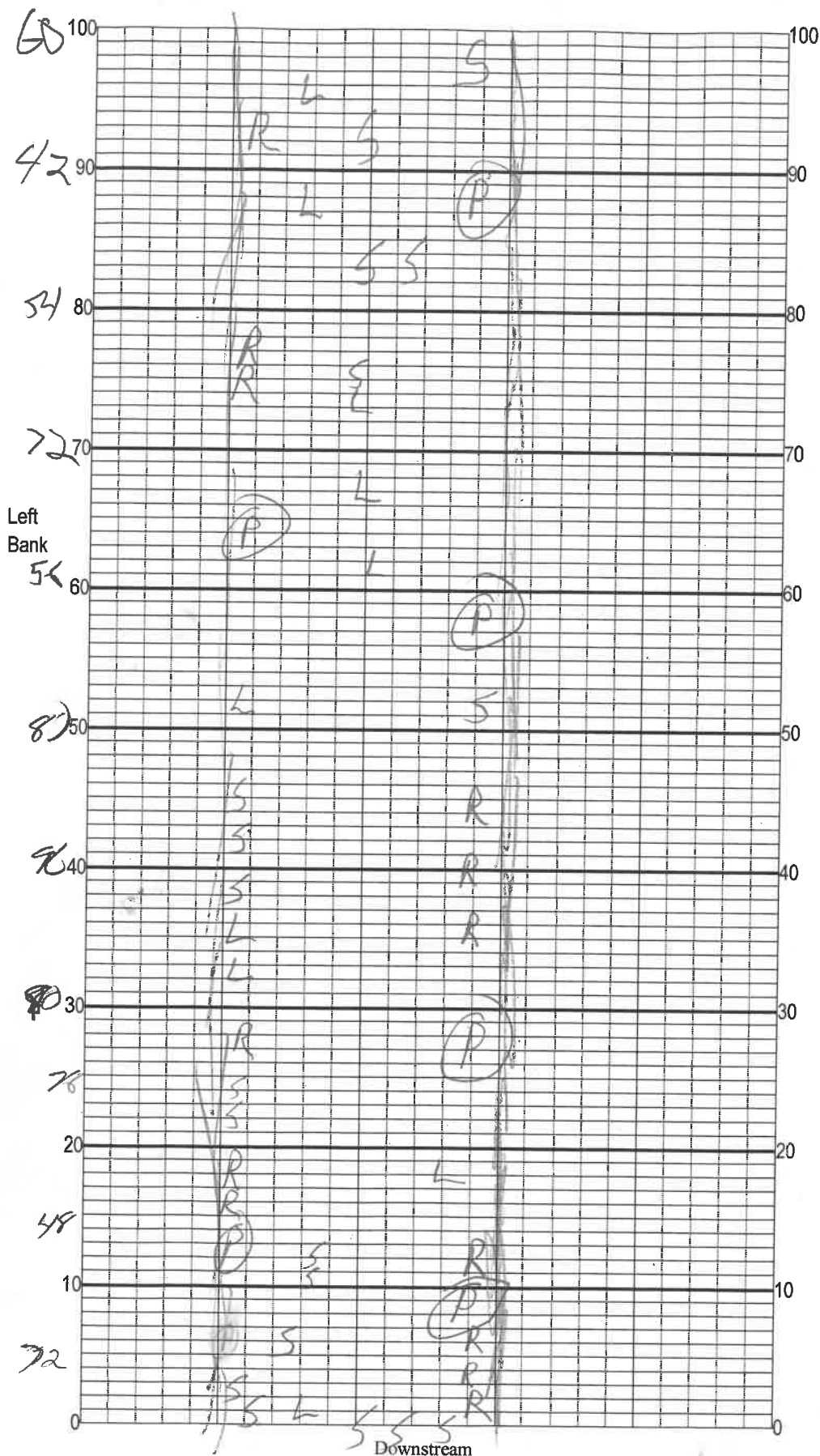
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>13</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>8</u>	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 <u>20</u>	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 <u>14</u> ----- Primary Score <u>55</u>	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	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging or straightening in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>20</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <u>5</u> Left Bank <u>5</u>	10 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>10</u>	10 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>70</u>	10 9	8 7 6	5 4	3 2 1

125

TOTAL SCORE

Date: <u>3/9/2020</u>	Analyst: <u>Bake Spencer</u>	Signature: <u>[Signature]</u>
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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: Lloyd Creek @ Old Lloyd Rd.

Date: 3/9/2020

Sampler: Blake Spencer

100 m: Latitude 30.476588
Longitude -84.007349

0 m: Latitude 30.477095
Longitude -84.009076

Substrates: Code key, draw proportionate habitat abundance. %

5 Snags 5%

R Roots/undercut banks 1%

L Leaf Packs (or mats) 2%

 Aquatic Macrophytes

P Pools total # observed = 4
range expected = 1

Average width 8m m

Average depth 0.4 m

Velocity measured at 10 meter mark.

WQ & chemistry taken at 10 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:

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

SAMPLE ID 80829 ORG ID 21FLWQA LATITUDE 30.476871
 COUNTY Jefferson STORET # GIWA0099 LONGITUDE -84.006746
 DATE 3/9/2020 TIME 9:20 SAMPLING AGENCY _____
 SITE NAME Lloyd Creek at Old Lloyd Rd.
 FIELD ID/NAME GIWA0099 CM 22030061 RECEIVING BODY OF WATER Lloyd Creek Sink

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)
<u>49%</u>	<u>23%</u>	<u>12%</u>	<u>8%</u>	<u>7%</u>	<u>0.2%</u>	<u>2%</u>	<u>Reservoirs</u>

Landscape Development Intensity Index (LDI) 2.18

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: >18m Right Bank: >18m

Hydrologic Modification Score (per FT 3101) 1-2

High Water Mark: 2.0 + 0.3 = 2.3
 (m) (above present water level) (present depth) (above bed)

Artificially Impounded ☐ Yes ☐ No

Artificially ☒ No ☐ Mostly recovered, more sinuous

Channelized: ☐ Some recovery ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%)
☐ Heavily Shaded ☒ Moderate Shaded (46-80%)

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
10 ~~10~~ m wide
0.4 m/s 0.3 m deep

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)	<u>5</u>	<u>5</u>	
Undercut Banks / Roots	<u>1</u>	<u>5</u>	
Leaf Packs or Mat	<u>2</u>	<u>5</u>	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....	<u>92</u>	<u>5</u>	
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)	SECCHI (M)
Top:	<u>0.15</u>	<u>13.50</u>	<u>6.84</u>	<u>9.94</u>	<u>95.4</u>	<u>66</u>	<u>0.03</u>	<u>0.3</u>
Mid:								☒ VOB
Bottom:								

Meter ID: Bio #2

Water Odors Normal ☒ Petroleum ☐
 Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐
 Globbs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
 Sample Preserved? ☒ Yes ☐ No
 Lot Number: See Field Exp: Sheet

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

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

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

Blake Spencer, Curtis Musson, Ben Rehs

SIGNATURE :

Blake Spencer

DATE :

3/9/2020

Entered by: 3/16/20

In SBIO CM 3/23/20

Entered by: ~~889~~ 3/16/20
QC: CM 3/23/20

~~Authorial: Ca. 3/23/1923~~
C

Storet Number: 22030061 CA

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² 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.

If no Dominant or Co-Dominant were selected, indicate with "X"

Indicate % cover macrophytes per section

[illegible]

>5 and ≤10% Macrophyte Coverage

>10 and $\leq 25\%$ Macrophyte Coverage

>25 and ≤50% Macrophyte Coverage

> 50% Macrophyte Coverage

Entered by: ~~AM~~ 3/16/20
 QC: cm 3/23/20
 Authorized: cm 3/23/20

SBIO: 80829 RPS: 9551

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Lloyd Creek @ Old Lloyd Rd.</u>					County: <u>Jefferson</u>		Date: <u>3/9/20</u>		Investigators: <u>B. K. Spencer</u>	
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	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5			72		5			56	
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		
10	1	N	N		70	1	N	N		
	2					2				
	3					3				
	4					4				
	5			48		5			72	
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		
20	1	N	N		80	1	N	N		
	2					2				
	3					3				
	4					4				
	5			78		5			54	
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		
30	1	N	N		90	1	N	N		
	2					2				
	3					3				
	4					4				
	5			40		5			42	
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		
40	1	N	N		100	1	N	N		
	2					2				
	3					3				
	4					4				
	5			46		5			60	
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		
50	1	N	N			1	N	N		
	2					2				
	3					3				
	4					4				
	5			80		5				
	6					6				
	7					7				
	8					8				
	9	N	N			9	N	N		

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%.

STORET Station Number: SLWA0099-CM
22030061

Secchi depth	<u>100</u>
Estimated?	<u>N</u>
# points ranked 4-6	<u>9</u>
total points assessed	<u>99</u>
% points ranked 4-6	<u>9</u>

Check accompanying data collected at same site/date.

Algal mat sample	<u>NO</u>
Linear Veg Survey	<u>✓</u>
Habitat Assessment	<u>✓</u>
SCI/Biorecon	<u>✓</u>
Water sample	<u>✓</u>

RQ- 2020-02-24-17

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

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: Biology #2

RQ: 2020-02-24-17

Project: SCI-BNCHM

- 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.	B. Spencer	3/9/20	0737	19.46	760	9.154	9.16	99.8	64.5	-	P/F	L/F
ICV	B. Spencer	3/9/20	0738	19.56	760	9.165	9.14	99.6	64.5	-	P/F	L/F
CCV	B. Spencer	3/9/20	1224	17.45	760	9.565	9.42	98.6	61.4	-	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 μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	B. Spencer	3/9/20	0742	191120B	12/2020	1000	1000	P/F	L/F
ICV	B. Spencer	3/9/20	0743	191120D	12/2020	1000	1000	P/F	L/F
CCV	B. Spencer	3/9/20	1226	2908C81	09/2021	100	101	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

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.	B. Spencer	3/9/20	0750	190618B	12/2020	7.02	19.00	7.00	-37.7	P/F	L/F
Calibr.	B. Spencer	3/9/20	0753	200221A	09/2021	4.00	19.67	4.00	136.7	P/F	L/F
Calibr.	B. Spencer	3/9/20	0757	190618C	12/2020	10.05	19.74	10.05	-209.6	P/F	L/F
ICV	B. Spencer	3/9/20	0759	190618C	12/2020	10.05	19.76	10.03	-208.5	P/F	L/F
CCV	B. Spencer	3/9/20	1228	200221A	09/2021	4.00	19.56	4.17	131.9	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 $+180 \pm 50$; 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 $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: WAS-SECT

Project ID: SCI-BNCHMK

Requester: Curtis Musson

Field Report Prepared By:

*Blake Spencer*Collected By: *Blake Spencer, Ben Ralys, Curtis Musson*

Sampling Agency:

FDEP

Location	Location: Lloyd Creek At Old Lloyd Rd		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>3/9/20</i> Time <i>0920</i>	☒ Eastern ☐ Central	Composite end Date — Time —	Bottle Group(s) (See pg 2)
Field ID	WIN ID/Field ID: 		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☒ % sat	Total Res. Chlorine (mg/L)	<i>A</i>
WIN/STORET	G1WA0099 CM 22030061		Temp (C) <i>13.50</i>	pH <i>6.84</i>	Sample Depth <i>0.15</i>	Sp. Conductance (umho/cm) <i>66</i>	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) <i>0.03</i>	Comments		
Location	Location: Lloyd Creek At Old Lloyd Rd		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>3/9/20</i> Time <i>1045</i>	☒ Eastern ☐ Central	Composite end Date — Time —	Bottle Group(s)
Field ID	WIN ID/Field ID: 		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	<i>B</i>
WIN/STORET	G1WA0099 CM 22030061		Temp (C) —	pH —	Sample Depth —	Sp. Conductance (umho/cm) —	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) —	Comments		
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date — Time —	☐ Eastern ☐ Central	Composite end Date — Time —	Bottle Group(s)
Field ID			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #			Temp (C)	pH	Sample Depth	Sp. Conductance (umho/cm)	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments		
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date — Time —	☐ Eastern ☐ Central	Composite end Date — Time —	Bottle Group(s)
Field ID			Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #			Temp (C)	pH	Sample Depth	Sp. Conductance (umho/cm)	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments		

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
<i>BLH</i>	<i>3/9/20</i>	<i>FA</i>	<i>1</i>	<i>[Signature]</i>	<i>3/9/20 1222</i>

Group: A	Bottle Type: P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS					
Group: A	Bottle Type: BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W					
Group: A	Bottle Type: P-250ML-WO-THI	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
ECOLI-18QT					
Group: A	Bottle Type: BG-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
W-E8321-DI W-E8321-MS					
Group: A	Bottle Type: P-500ML	# of Bottles: 1	Preservative: HNO3	Enter Number of Bottles Sent to Lab	1
W-HARD W-ICP W-ICPMS					
Group: A	Bottle Type: P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: A	Bottle Type: P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
W-PO4-F					
Group: A	Bottle Type: BG-1L	# of Bottles: 4	Preservative: ICE	Enter Number of Bottles Sent to Lab	4
W-PSNP-TQ					
Group: B	Bottle Type: PT-50ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	0
ALGAL_ID					

Group: B

Bottle Type:

PJ-2L

of Bottles: 2

Preservative:

Formalin

Enter Number of Bottles Sent to Lab

3

MI-FW-QLDC

Cooler Packing Worksheet for Request: RQ-2020-02-24-17

WAS SCI Audit

Ship Cooler On: 2/10/2020

Customer/Project: WAS-SECT/SCI-BNCHMK

Assigned To: MCCOY_I

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd



Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Nutrients, Metals, Tracers, Q-PSNP-TQ

Group B: SCI, Algae_ID

Packing Notes:

No FedEx Labels

No Trash Bag

No Bubblewrap

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: P-1L

Qty: 1

Preservation: ICE

Lot #

00076335

Description: Plastic Bottle 1L

Analysis

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

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 (not valid for NPDES monitoring)

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

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L

Qty: 1

Preservation: ICE

Lot #

1263740

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

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

Container ID: P-250ML-WO-THI

Qty: 1 Preservation: ICE

Lot #

L19247#

Description: 250 ml Sterilized no tablet

Analysis

ECOLI-18QT

Description

Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

Container ID: BG-500ML

Qty: 1 Preservation: ICE

Lot #

00075691

Description: Brown Glass Bottle 500ML

Affix BLUE dot to container.

Analysis

W-E8321-DI

W-E8321-MS

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML

Qty: 1 Preservation: HNO3

Lot #

00075720

Description: Plastic Bottle 500 mL

Affix RED nitric acid dot to container.

Analysis

W-HARD

W-ICP

W-ICPMS

Description

Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3

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: 1 Preservation: ICE And H2SO4

Lot #

00075720

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: 1 Preservation: FILTER-ICE

Lot #

00075961

Description: Plastic Bottle 125 mL

Analysis

W-PO4-F

Description

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

Container ID: BG-1L

Qty: 4 Preservation: ICE

Lot # 00074930

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-PSNP-TQ

Description

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 # 430897

Description: Plastic Tube 50 mL

Analysis

ALGAL_ID

Description

Qualitative assessment of algal taxa present without counts

Container ID: PJ-2L

Qty: 2 Preservation: Formalin

Lot # Bio-Wash

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: IM

Number of Coolers: 2

Date: 2/10/20

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☐ FedEx Bills, if applicable
- ☐ Plastic Bags/Zip Ties
- ☐ Acid Labels (sets of 24)

If Preservation Included:

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

PLEASE RETURN ALL COOLERS FOR RQ-2020-02-24-17