



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?
Yes / No

WIN Station Name: Unnamed Branch at Brit Place Date: 10/16/18
WIN/ Field ID: G2NE1140 WBID: 2486 Latitude: 29.93633
County: Clay ORG ID: 21FLA Longitude: -81.9273
Receiving Body of Water: Black Creek South Ponds RQ-2018- 10-08-13

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parris									
B. Davis									

Sampling Equipment		
☐ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>P-0.55</u>		
Equipment ID <u>Curlo #7</u>		

Collection Method		
☒ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low/ Normal / High / Flooded Meter ID# P-0.55 Matrix: Fresh / Marine / DI
Photos: Yes No Flow: No Flow / Intestinal / Flowing / NA Tide: Rising/ Falling/ Slack/ NA Tide Times: High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1000	0.1	0.1	VOB	6.24	71.7	4.66	0.03	61.4	22.2
CEN		0.2		0.25						

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

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	<u>SAB197090</u>	<u>07/16/19</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	<u>R71A12512</u>		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice ☐ Other			

Notes:

WIN / FIELD ID



G2NE1140

Unnamed Branch at Brit Place

Signature: B. Davis Date: 10/16/18

Enter Field Parameters, Verify Station ID In LIMS DMT: G2NE1140 QC Station ID, Field Parameters In LIMS DMT:

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

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

78947

SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: G2NE1140	DATE (MM/DD/YY): 10/16/18	RECEIVING BODY OF WATER: Spring Black Creek
REMARKS:	COUNTY: Clay Co.	LOCATION: unnamed Bar-Place	FIELD ID/NAME:	

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>10</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>6</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>13</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>13</u> ----- Primary Score <u>42</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 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>18</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>7</u> Left Bank <u>6</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull 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 <u>10</u> Left Bank <u>10</u>	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 <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>70</u>	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

113 TOTAL SCORE

Date: 10/16/18	Analyst: Jeremy Barnet	Signature:
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Left Bank

Location: unnamed @ Bridge
 Date: 10/16/18
 Sampler: JP/BD

100 m: Latitude _____	
Longitude _____	
0 m: Latitude _____	
Longitude _____	
Substrates: Code key, draw proportionate habitat abundance. %	
	Snags <u>4.5</u>
	Roots/undercut banks <u>1.5</u>
	Leaf Packs (or mats) <u>2.1</u>
	Aquatic Macrophytes _____
	_____
	_____
	Pools total # observed = _____ # range expected = _____
Average width <u>2</u> m	
Average depth <u>0.1</u> m	
Velocity measured at <u>100</u> meter mark.	
WQ & chemistry taken at <u>100</u> 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:

< 2 M of Macrophytes was observed while doing the LVS? YES or NO

$\approx 6m$
 $10 \text{ snags} = 1.25 + 0.75 + 1.5 + 0.5 + 0.5 + 0.5 + 1.5$

$\text{Roots} = 0.4 + 0.5 + 0.35 + 0.5 + 0.5$
 $\approx 2m$

$2m \text{ wide} = 200m^2 \text{ eq}$

Length of grid represents 100 m of stream (not linear meters).
 (Horizontal scale is double vertical scale, draw proportionately).

78947 (N) ✓ DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Unnamed Branch @ Boat Place County: Cley Date: 10/16/18 Investigators: B. Davis J. P. Davis

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

STORET Station Number: 62VE1140

Secchi depth 100
Estimated? NO

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	✓
Habitat Assessment	✓
SCI/Biorecon	✓
Water sample	✓

RQ- 2018-10-08-13

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

0	1	N			60	1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1	N			70	1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1	N			80	1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1	N			90	1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1	N			100	1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1	N				1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			

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 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 79447 ORG ID 2IFLA LATITUDE 29.92653
COUNTY clay STORET # 22NE1140 LONGITUDE -81.9273
DATE 10/16/18 TIME 1000 SAMPLING AGENCY PEAR NEV
SITE NAME Unadilla Branch @ Best Place RECEIVING BODY OF WATER Springs Black Creek
FIELD ID/NAME _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: P-0 P55

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: 7114 Right Bank: 7114

Hydrologic Modification Score (per FT 3101)

1-2

High Water Mark: 0.7 + 0.1 = 0.8
(m) (above present water level) (present depth) (above bed)

Artificially Impounded
☐ Yes ☒ No

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

2 m wide

0.17 m/s

0.1 m deep

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

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) 56 7
Undercut Banks / Roots 1.5 7
Leaf Packs or Mat 1
Aquatic Vegetation
Rock or Shell Rubble.....
Sand..... 83 6
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: 0.05 22.2 4.66 6.24 71.7 61.4 0.03 108
Mid: 0.1
Bottom: 0.1

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

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

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

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

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

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

Clarity Clear ☒ Slightly Turbid ☐
Turbid ☐ Opaque ☐

ABUNDANCE

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

AMBIENT FIELD CONDITIONS / NOTES:

Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10
☐ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

SIGNATURE:

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

Waterbody: <u>Unimproved Road @ Boat Place</u>		Date: <u>10/16/18</u>	County: <u>Clay</u>	Storet Number: <u>G2NE1140</u>
Analyst: <u>B. Davis</u>		Signature: <u>B. Davis</u>		
Comments:				

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.

[illegible]

Group: A	Bottle Type: P-1L	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
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
CHLSUITE-W				
Group: A	Bottle Type: P-250ML-WI-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
NE-ALS-ECQ				
Group: A	Bottle Type: P-500ML	# of Bottles: 2	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC				
Group: A	Bottle Type: P-125ML	# of Bottles: 2	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab
W-PO4-F				
Group: B	Bottle Type: PJ-2L	# of Bottles: 4	Preservative: Formalin	Enter Number of Bottles Sent to Lab
MI-FW-QLDC				

2 team sampling Same RQ



ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Phillips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-665-7222 x06 • FAX (904) 739-2011

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SR#

CAS Contract

Project Name LSJN SCI		Project Number 2018-10-08-13		ANALYSIS REQUESTED (Include Method Number and Container Preservative)	
Project Manager Jeremy Parnish		Email Address Jeremy.W.Parnish@als.com		PRESERVATIVE 6	
Company/Address FEDER		Phone # 904 256-1700		FAX # 32256	
Sampler's Signature Jeremy Parnish		Sampler's Printed Name Jeremy Parnish		NUMBER OF CONTAINERS ECO 1	
CLIENT SAMPLE ID 62NE1140	LAB ID	DATE 10/16/18	SAMPLING TIME 1000 SW	MATRIX 1	REMARKS/ ALTERNATE DESCRIPTION
SPECIAL INSTRUCTIONS/COMMENTS					
TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) X STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE					
REPORT REQUIREMENTS I. Results Only II. Results + QC Summaries (LCS, DUP, MSMSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data Edata Yes No					
INVOICE INFORMATION PO # BILL TO:					
RELINQUISHED BY Jeremy Parnish		RECEIVED BY Paula Maxwell		RELINQUISHED BY Paula Maxwell	
Signature Jeremy Parnish		Signature Paula Maxwell		Signature Paula Maxwell	
Printed Name Jeremy Parnish		Printed Name Paula Maxwell		Printed Name Paula Maxwell	
Firm ALS		Firm ALS		Firm ALS	
Date/Time 10/16/18 1315		Date/Time 10/16/18 1317		Date/Time 10/16/18 1317	
See QAPP ☐ O.D.					
SAMPLE RECEIPT: CONDITION/COOLER TEMP:					
RELINQUISHED BY Jeremy Parnish					
RECEIVED BY Paula Maxwell					
RELINQUISHED BY Paula Maxwell					
RECEIVED BY Paula Maxwell					