



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes / No

WIN Station Name: Grog Branch @ Long Bay Rd Date: 10-16-18
(mm/dd/yyyy)
WIN/ Field ID: 20030833 WBID: 2407 Latitude: 30.1074
(Decimal Degrees)
County: CLAY ORG ID: 21 FIA Longitude: 81.8659
(Decimal Degrees)
Receiving Body of Water: Little Black Creek RQ-2018- 10-08-13

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
A. KALIN BACHO					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole	
P. O'CONNOR					☐	☐	☐	☐	☐	☐ Carboy	☐ Syringe		
C. RUBEN					☐	☐	☐	☐	☐	☐ Dipper	☐ Other		
										Depth Measured with <u>YSI 11</u>			
										Equipment ID <u>011043</u>			
										Collection Method			
										☒ Wading	☐ Canoe/Kayak		
										☐ From Shore	☐ Electric Motor		
										☐ Other	☐ Gasoline Motor		
Water Level: Dry/ Pooled/ <u>Low</u> / Normal / High / Flooded					Meter ID# <u>YSI 11</u>					Matrix: <u>Fresh</u> / Marine / DI			
Photos: <u>Yes</u> / No					Flow: No Flow / Intestinal / <u>Flowing</u> / NA					Tide: Rising/ Falling/ Slack <u>NA</u>			
Tide Times: <u>High</u> / 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	0935	0.28	0.1	0.28	3.9	46	6.24	0.06	132	23.1	☒		
CEN				S									
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: 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 ☐ H ₂ SO ₄	<u>SA 8197090</u>	<u>071619</u>	☒ <2				
Metals	☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO ₃			☐ <2				
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter					☒ Ice	<u>D7KA12572</u>						
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							
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					☐ Ice							
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Other							

Notes: SCI LVS RPS HA/Phys Chem

Field / WIN ID:



20030833

Grog Branch @ Long Bay Rd.

Signature: B. D.

Date: 10/22/18

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: 157 10/22/18
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets BD 10/22/18 Migrate Data to WIN: _____ Verify Data In WIN: _____
(Initials/Date) (Initials/Date)

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

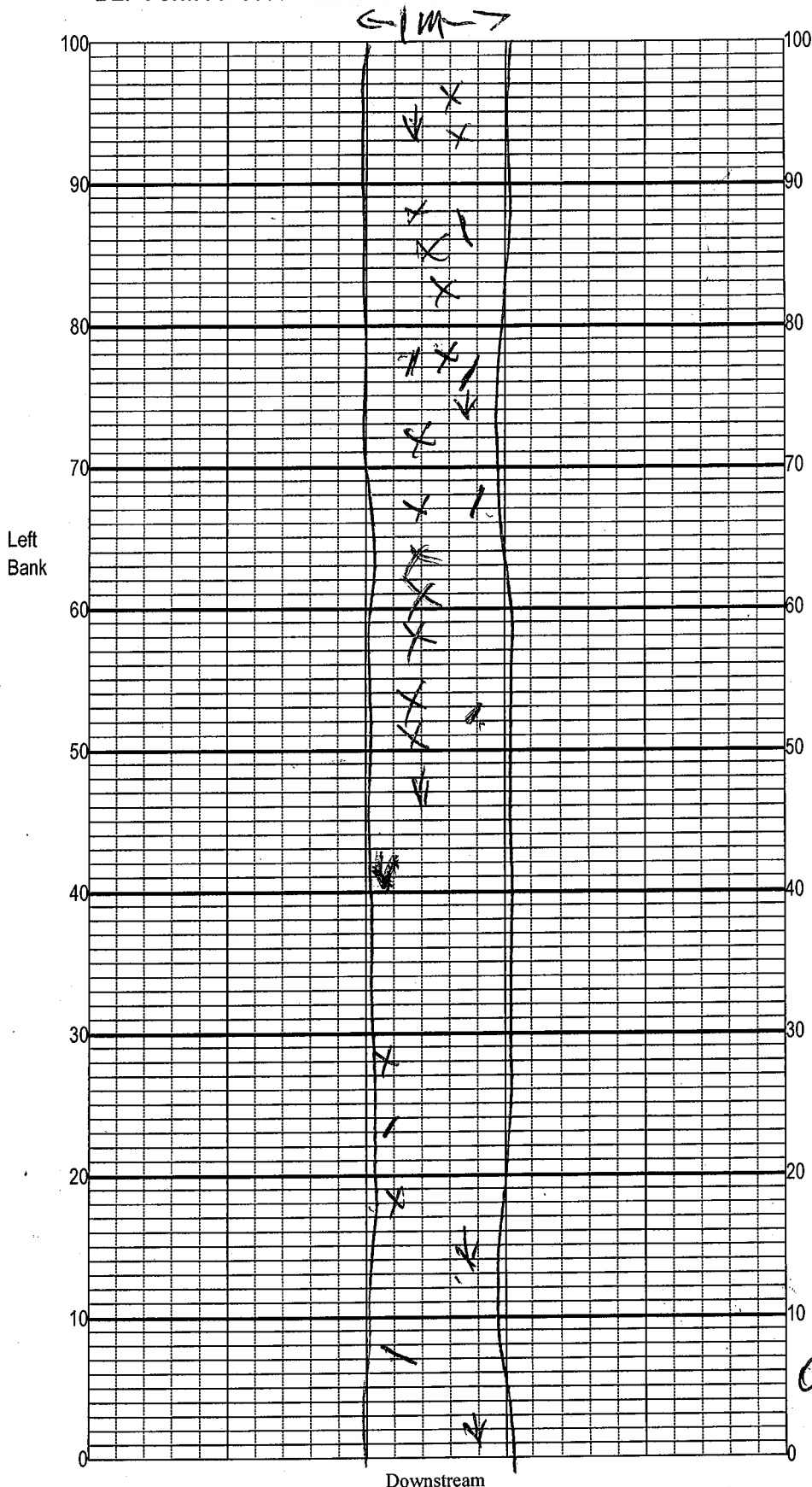
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 20030833	DATE (MM/DD/YY): 10-16-18	RECEIVING BODY OF WATER: L. Black Cr.
REMARKS: RQ 2018-10-08-13	COUNTY: CLAY	LOCATION: Grog Br @ Long Br. Rd	FIELD ID/NAME: 20030833	

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 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 9	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 12	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 8 Primary Score 40	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 9	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank 4 Left Bank 4	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 10 Left Bank 7	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 10 Left Bank 10 Secondary Score 54	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

TOTAL SCORE

Date: 10-16-18	Analyst: PO Conn	Signature: Patricia Ann
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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: Grog Br @ Long Br Rd
Date: 10-16-18
Sampler: PO Condo

100 m: Latitude 30.10702
Longitude 81.86452

0 m: Latitude 30.10708
Longitude 81.86356

Substrates: Code key, draw proportionate habitat abundance. %

☒	Snags	_____ %
☒	Roots/undercut banks	_____ %
☒	Leaf Packs (or mats)	_____ %
☒	Aquatic Macrophytes	_____ %
☐		_____ %
☐		_____ %
☐	Pools	total # observed = _____ # range expected = _____

Average width _____ m

Average depth _____ m

Velocity measured at _____ meter mark.

WQ & chemistry taken at _____ 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

0.25 m/s
orontia + sarrus
70% Roots
3 1/2 Snags
3 1/2 Voss

18948

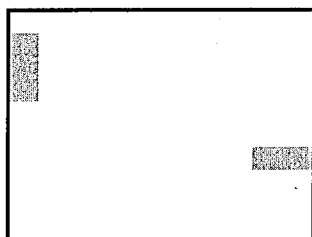
Analyst: P. O'Connor Signature: _____

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.

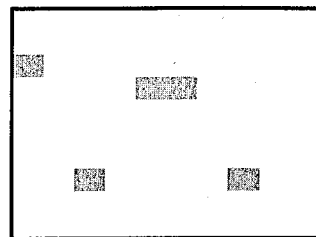
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

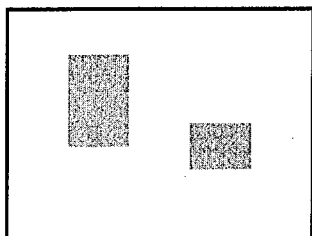
5% Macrophyte Coverage



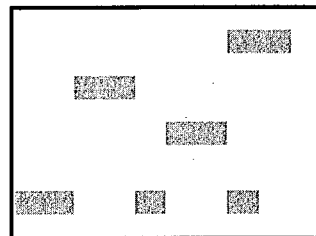
5% Macrophyte Coverage



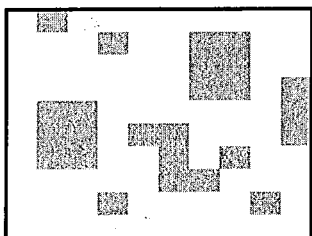
10% Macrophyte Coverage



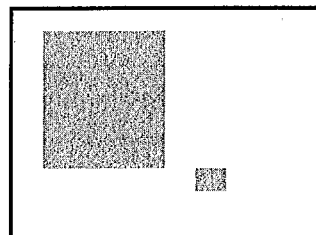
10% Macrophyte Coverage



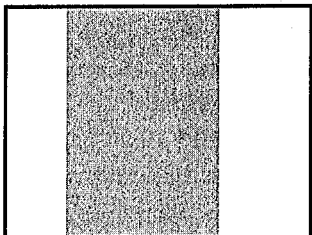
25% Macrophyte Coverage



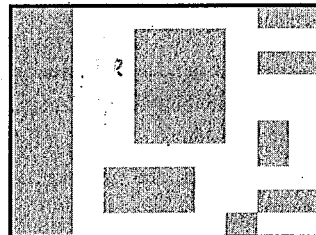
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



78948 (JK)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Grog Branch @ Long Br Rd

County: CLAY

Date: 10-16-18

Investigators: CRUBEN, A. KALMBACH, P. O'CONNOR

STORET Station Number:

20030833

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			60	1	N			
	2					2				
	3					3				
	4					4				
	5			94		5				96
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5				96
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			94		5				96
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5				96
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			94		5				96
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1	N			
	2					2				
	3					3				
	4					4				
	5			96		5				96
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth	10.3
Estimated?	

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

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

0-100 N 1

↓ 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%.

78948 DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 21FIA LATITUDE _____
 COUNTY CLAY STORET # 20030833 LONGITUDE _____
 DATE 10-16-18 TIME _____ SAMPLING AGENCY DEAR NED R&E
 SITE NAME Grog Br @ Long Branch Rd.
 FIELD ID/NAME 20030833 RECEIVING BODY OF WATER Little Black Creek

RIPARIAN ZONE / STREAM FEATURES

Meter ID: YSI 71

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>70</u> Silviculture <u>0</u> Field/Pasture <u>0</u> Agricultural <u>0</u> Residential <u>30</u> Commercial <u>0</u> Industry <u>0</u> Other (Specify) <u>0</u>						Landscape Development Intensity Index (LDI) <u>0</u>	
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>1.5</u> m wide <u>0.15</u> m/s <u>0.3</u> m deep	
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12</u> Right Bank: <u>12</u>				Hydrologic Modification Score (per FT 3101) <u>0.3</u>			
High Water Mark: <u>1.0</u> + <u>0.0</u> = <u>1.0</u> (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%)					

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 Invert PERI % # Times # Times Coverage Sampled Sampled Woody Debris (Snags) <u>35</u> <u>5</u> <u>0</u> Undercut Banks / Roots <u>340</u> <u>5</u> <u>0</u> Leaf Packs or Mat <u>0</u> <u>0</u> <u>0</u> Aquatic Vegetation <u>35</u> <u>5</u> <u>0</u> Rock or Shell Rubble.. <u>0</u> <u>0</u> <u>0</u> Sand..... <u>90</u> <u>905</u> <u>0</u> Mud / Muck / Silt <u>0</u> <u>0</u> <u>0</u> Other <u>0</u> <u>0</u> <u>0</u> Other <u>0</u> <u>0</u> <u>0</u>			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.1</u> <u>23.1</u> <u>6.24</u> <u>3.9</u> <u>46</u> <u>132</u> <u>0.06</u> <u>0.285</u> Mid: <u>0.1</u> <u>23.1</u> <u>6.24</u> <u>3.9</u> <u>46</u> <u>132</u> <u>0.06</u> <u>0.6</u> Bottom: <u>0.1</u> <u>23.1</u> <u>6.24</u> <u>3.9</u> <u>46</u> <u>132</u> <u>0.06</u> <u>0.6</u> System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐					
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: <u>5A8197090</u> Exp: <u>07-16-19</u>		
Water Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			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: <u>Secchi 0.3</u> 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

A. Kalmbacher, P. O'Connor, C. RUBEN

SIGNATURE: _____

**Florida Department of Environmental Protection
Central Laboratory Submittal Form**

Customer: NE-DIST

Project ID: SMP

Requester: **Jeremy M. Parrish**

Field Report Prepared By:

Collected By: A. Kalmbacher C. Kuper. Polkono Sampling Agency:

Sampling Agency: *Ne*



20030833

Field / WIN ID:

Grog Branch @ Long Bay Rd.

[illegible]

Relinquished By: <i>Bobl Egan</i>	Date/Time 10-16-78	Shipping Method <i>Fed Ex</i>	Number of Coolers Shipped: <i>1</i>	Received By:	Date/Time
--------------------------------------	-----------------------	----------------------------------	--	--------------	-----------

Group: A	Bottle Type:	P-1L	# of Bottles: 2	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: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WI-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 to 415 SAR
	NE-ALS-ECQ						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	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: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2
	MI-FW-QLDC						



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Philips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 • FAX (904) 739-2011

SF#

CAS Contract

Project Name LSJRWest Sci		Project Number RQZ018-10-08-13		ANALYSIS REQUESTED (Include Method Number and Container Preservative)	
Project Manager J Parrish		Email Address		PRESERVATIVE 3	
Company/Address DEAR NIED ROC					
8800 BAYMEADOWS WAY West					
JAX FL 32256					
Phone # 904 256 1700		FAX #			
Sampler's Signature Patrick O'Connor		Sample's Printed Name Patrick O'Connor			
CLIENT SAMPLE ID 20030833	LAB ID	SAMPLING DATE 10-16-18	TIME 0935	MATRIX SW	
SPECIAL INSTRUCTIONS/COMMENTS 0.3°C					
TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) _____ STANDARD _____ REQUESTED FAX DATE _____ REQUESTED REPORT DATE _____					
REPORT REQUIREMENTS I. Results Only _____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required) _____ III. Results + QC and Calibration Summaries _____ IV. Data Validation Report with Raw Data _____ V. Specialized Forms / Custom Report _____ Edata Yes _____ No _____					
INVOICE INFORMATION PO # _____ BILL TO: _____					
RECEIVED BY Signature _____ Printed Name _____ Firm _____ Date/Time _____					
RECEIVED BY Signature _____ Printed Name _____ Firm _____ Date/Time _____					
RECEIVED BY Signature _____ Printed Name _____ Firm _____ Date/Time _____					