



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Lexington Creek @ Timberlane Rd

Date: 04/18/2018

WIN/ Field ID: G1TLHR0088

WBID: 758

Latitude: 30.50643

(mm/dd/yyyy)

County: Leon

ORG ID: 21FTLHR

Longitude: -84.28378

(Decimal Degrees)

Receiving Body of Water: Lake Jackson

RQ-2018- 04-09-55

(Decimal Degrees)

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Alicia Hoque										
Chris Green										

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with: Serchit graduated line		
Equipment ID: NA		

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded		Meter ID#	Matrix:
Normal		YSI #12	Fresh / Marine / DI

Photos: Yes / No		Flow: No Flow / Intestinal / Flowing / NA		Tide: Rising/ Falling/ Slack/ NA		Tide Times: High / Low	
No		Flowing		NA		High / Low	

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	0925		0.05		10.72	103.3	6.73	0.04	85	13.82
CEN		0.1	0.15	0.15						

Biological Samples Collected:		None	HA	SCI	RPS	Algae ID	LVS	LVI	Other:
									LVS - 2m ²

SBIO ID Numbers:		SBIO-ID:	HA-ID:	RPS-ID:	Macrophyte-ID:	LIMS#:
		78358	15120	8988		

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	5A7275010	10/2/18	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <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-CI-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 Coll ☐ F Coll ☐ 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			

Notes:	
A-b/t/m	

Field/WIN ID	
G1TLHR0088	

Location	
LEXINGTON CREEK @ TIMBERLA	

Signature:	
Alicia Hoque	

QC Station ID, Field Parameters In LIMS DMT:	
04/18/2018	

Enter Field Parameters, Verify Station ID in LIMS DMT:

26-5-4-2018

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)

(Initials/Date)

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

Waterbody: Lexington Creek	Date: 4/18/18	County: Leon	Store Number: 6171 HRC088
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Analyst: <u>Alicia Hogue</u>	Signature: <u>Alicia D Hogue</u>
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Comments: 2m

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)		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											Micranthemum glomeratum												
Bacopa caroliniana											Micranthemum umbrosum												
Bacopa monneri											Myriophyllum aquaticum												
Bidens mitis											Najas guadelupensis												
Boehmeria cylindrica											Nuphar luteum												
Centella asiatica											Orontium aquaticum												
Ceratophyllum demersum											Panicum hemitomon												
Chara											Panicum repens												
Cicuta maculata											Panicum rigidulum												
Cladium jamaicense											Pistia stratioides												
Colocasia esculenta											Polygonum glabra												
Commelina diffusa											Polygonum hydropiperoides												
Commelina virginica											Polygonum punctatum												
Crinum americanum											Pontedaria cordata												
Diodia virginiana											Potamogeton illinoensis												
Eichhornia crassipes											Ruellia simplex												
Eleocharis (wispy viviparous)											Sacciolepis striata												
Hydrilla verticillata											Sagittaria kurziana												
Hydrocotyle											Sagittaria lancifolia												
Hygrophila polysperma											Sagittaria latifolia												
Hymenocallis											Salvinia minima												
Lachnanthes caroliniana											Samolus parviflora												
Landoltia punctata											Saururus cernuus												
Lemna											Sparganium americanum												
Limnophila sessiflora											Typha												
Ludwigia leptocarpa											Vallisneria americana												
Ludwigia palustris				X							Zizania aquatica												
Ludwigia peruviana																							
Ludwigia repens																							
Luziola fluitans																							
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section																							

Ludwigia palustris

Revision Date: March 1, 2014

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

SAMPLE ID _____ ORG ID HR 216TLHR LATITUDE 30.50643
 COUNTY Leon STORET # GTLHR0088 LONGITUDE -84.28378
 DATE 4-18-2018 TIME 0940 SAMPLING AGENCY 8034
 SITE NAME Lexington Creek @ Timberlake
 FIELD ID/NAME _____ RECEIVING BODY OF WATER Lake Jackson

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ 5 Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ 95 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				Typical Width (m) Depth (m)/Velocity (m/sec) Transect 2.0 ☒ 0.25 m wide 0.25 m/s 0.3 m/s 0.3 m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: ☒ 10 Right Bank: ☒ 18		Hydrologic Modification Score (per FT 3101) ☐		0.1 m deep 0.1 m deep 0.1 m deep			
High Water Mark: 0.4 + 0.1 = 0.5 (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 ☐
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SUBSTRATE TYPE Assessment Tool: ☒ SCI ☐ RPS ☐ LVS ☐ LCI ☐ BioRecon				WATER QUALITY							
				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Woody Debris (Snags)	0.6			Top							0.1
Undercut Banks / Roots	1.6	8		Mid	0.15	13.2	6.73	10.12	1033	85	0.04
Leaf Packs or Mat	0.5	2		Bottom							
Aquatic Vegetation	0.1			Meter ID: <u>YS1#12</u>							
Rock or Shell Rubble				Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐				Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐			
Sand	97.2	10		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>5827500</u> Exp: <u>10/2/18</u>				Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐			
Mud / Muck / Silt				Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>NA</u> Exp:				Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐			
Other				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:

0940=SC collected

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

Chris Green, Alicia Hogue

SIGNATURE:

Alicia Hogue

DATE:

4/18/2018

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

SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>G174 HC0088</u>	DATE (MM/DD/YY): <u>04/18/18</u>	RECEIVING BODY OF WATER: <u>Lake Jackson</u>
REMARKS:	COUNTY: <u>Leon</u>	LOCATION: <u>Lexington Creek @ Timber Lake</u>	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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 4 3 2 1
Substrate Availability <u>3</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 <u>3</u> 2 1
Water Velocity <u>19</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 <u>19</u> 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>18</u> ----- Primary Score <u>45</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. <u>20</u> 19 <u>18</u> 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>20</u>	<u>20</u> 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>7</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 <u>7</u> 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>7</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>9</u> Left Bank <u>9</u> ----- Secondary Score <u>69</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

114 **TOTAL SCORE**

Date: <u>04/18/18</u>	Analyst: <u>Alicia Hogue</u>	Signature: <u>Alicia D Hogue</u>
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Lexington Creek @ Timberlake County: Leon Date: 4/18/2018 Investigators: Alicia Hoake, Chris Green

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 STORET Station Number: GILHR 0088

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	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		96		5	N		87
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
10	1	N			70	1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		89		5	N		87
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
20	1	N			80	1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		94		5	N		81
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
30	1	N			90	1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		93		5	N		95
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
40	1	N			100	1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		93		5	N		88
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	N		
50	1	N				1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	N		
	5	N		93		5	N		
	6	N				6	N		
	7	N				7	N		
	8	N				8	N		
	9	N				9	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%.

Secchi depth 0.1
Estimated? NO

points ranked 4-6 0
total points assessed
% points ranked 4-6

Check accompanying data collected at same site/date.
Algal mat sample NO
Linear Veg Survey NO
Habitat Assessment YES
SCI/Biorecon YES
Water sample YES
RQ- 2018-04-09-55

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 is qualified data on this name.

Meter ID: 12 YSI 600 XLM

RQ-

Project: SMP 2018

- 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 4/17

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.	Chris Green	4-18-18	7:30	20.86	8.93	8.94	100.0	33.9	0.83	P / F	L / F
ICV	11	11	7:50	20.04	9.00	9.07	99.8	—	—	P / F	L / F
CCV	11	11	12:35	21.36	8.85	8.58	96.9	—	—	P / F	L / F
CCV										P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

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.	Chris Green	4-18-18	7:35	180116B	01/19	1000	1000	P / F	L / F
ICV	11	11	7:47	2802833	01/20	100	97	P / F	L / F
CCV	11	11	12:29	11	11	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	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Chris Green	4-18-18	7:37	171121A	6/19	7.0	7.00	-27.4	P / F	L / F
Calibr.	11	11	7:40	180116D	1/19	4.0	4.00	145.1	P / F	L / F
Calibr.	11	11	7:43	180221E	9/19	10.0	9.99	-196.5	P / F	L / F
ICV	11	11	7:45	11	11	11	10.00	—	P / F	L / F
CCV	11	11	12:32	180116D	1/19	4.0	4.02	—	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 10 169.1, slope from 4 to 7 172.5 (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 $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Customer: TLH-ROC

Requester: Chris Green

Field Report Prepared By:

Project ID: SMP

Collected By:

Sampling Agency:

823

[illegible]

Relinquished By:

Date/Time

Shinrin Method

Number of Coolers Shipped:

Received By

Data/Time

Alicia Hogue

04/18/18

1148

hand

— 219 —

Received By

Date/Time 10/17/11