



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

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Data Qualified?

Yes / No

Location/STORET Station Name: Little Alapaha @ US129

Date: 10/17/2017
(mm/dd/yyyy)

STORET # G1TLHR0037

WBID: 3330

Latitude: 30.565476

County: Hamilton RQ - 2017-10-16-42

ORG ID: 21FLTLHR

Longitude: 82.987145

Receiving Body of Water: Alapaha River

Field ID: G1TLHR0037-2017-05

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Jen Woods Jade Butchett					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole
										☐ Carboy	☒ Syringe	
										☐ Dipper	☐ Other	
										Equipment ID		
								Collection Method				
								☒ Wading			☐ Via Boat	
								☐ From Shore			☐ Canoe/Kayak	
								☐ Other (note below)			☐ Electric Motor	
											☐ Gasoline Motor	

Water Level: Dry / Pooled / Low / Normal / High / Flooded						Matrix: Fresh / Marine / DI					
Meter ID# 6203			Photos: Yes / No			Tide Falling: Yes / No / NA					
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)	
EST	1200	0.2	0.4	4.22	46.6	6.13	0.04	0.4	959	22.36	
CEN											

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

SBIO ID Numbers: SBIO-ID: 320266 RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	32039	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP		☒ Ice ☒ H2SO4	7823030	9/21/16	☒ <2
Metals	☒ W-ICPMS ☐ W-ICP		☒ Ice ☒ HNO3	7821050	6/15/16	☒ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter		☒ Ice	Place Preservative Sticker(s) Here (If Available)		
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 ☐ qPCR		☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA		☐ Ice			
Pesticides	☒ W-PSNP-TQ ☒ W-AHERB-AA ☒ W-PYR-AA-R ☒ W-PCL-SQ-R ☒ W-UHERB-AA ☒ W-GLYPH ☒ W-SUC-AA-R		☒ Ice ☐ Other			

Notes:

G1TLHR0037-2017-05

WBID 3330 Field ID ↑ STORET ↓

Little Alapaha @ US 129

G1TLHR0037

Signature: [Signature] Date: 10/17/17

Field Parameters Entered into LIMS: [Signature] 10-26-17 Field Parameters QC in LIMS: [Signature] 11-13-17

Date Migrated to STORET: [Signature] 2-23-18 Field Sheets Scanned/Saved: [Signature]

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

SAMPLE ID G1TLHR0037 ORG ID 405921FUTLHR LATITUDE _____
 COUNTY Hamilton STORET # G1TLHR0037 LONGITUDE _____
 DATE 10/17/17 TIME 1220 SAMPLING AGENCY 5034
 SITE NAME Little Alapaha River @ US 129
 FIELD ID/NAME G1TLHR0037-2017-05 RECEIVING BODY OF WATER Alapaha River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>46</u> Silviculture <u>40</u> Field/Pasture <u>10</u> Agricultural _____ Residential <u>10</u> Commercial _____ Industry _____ Other (Specify) _____								Landscape Development Intensity Index (LDI) _____
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy				Typical Width (m) Depth (m)/Velocity (m/sec) Transect				
Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy				_____ m wide				
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>716</u>				Hydrologic Modification Score (per FT 3101) _____				
High Water Mark: <u>0.3</u> + <u>0.4</u> = <u>0.7</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%)				
Channelized: ☐ Some recovery ☐ Recent, severe				☒ 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

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	<u>0.7</u>	<u>5</u>	
Undercut Banks / Roots	<u>0.15</u>	<u>5</u>	
Leaf Packs or Mat	<u>0.5</u>	<u>5</u>	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....	<u>96.05</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>0.2</u>	<u>22.38</u>	<u>6.13</u>	<u>4.22</u>	<u>48.16</u>	<u>95.9</u>	<u>0.04</u>	<u>0.4</u>
Mid:								☒ VOB
Bottom:								
Meter ID: <u>EX03</u>								
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>7233030</u> Exp: <u>8/21/16</u>				Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐				
Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____				Clarity Clear ☐ Slightly Turbid ☐ Turbid ☒ Opaque ☐				

ABUNDANCE

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

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

AMBIENT FIELD CONDITIONS / NOTES:

SCI @ 1220
☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

Woods/Bucknett

SIGNATURE:

[Signature]

DATE:

10/17/17

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

SAMPLING AGENCY: <u>6034</u>		STORET STATION NUMBER: <u>GHLR0037</u>	DATE (MM/DD/YY): <u>10/17/17</u>	RECEIVING BODY OF WATER: <u>Alapaha River</u>
REMARKS:	COUNTY: <u>Hamilton</u>	LOCATION: <u>Little Alapaha @ US 129</u>	FIELD ID/NAME: <u>GHLR0037-2017-05</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>11</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>2</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>17</u> ----- Primary Score <u>43</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>20</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>10</u> Left Bank <u>10</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>40</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

123

TOTAL SCORE

Date: <u>10/17/17</u>	Analyst: <u>Woods/Buschelt</u>	Signature: <u>[Signature]</u>
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G1TLHR0037

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <i>Litt Alpha @ 129</i>					County: <i>Hamilton</i>		Date: <i>10/12/17</i>		Investigators: <i>Woods/Buckhett</i>	
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			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5			96		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%.

STORET Station Number:
G1TLHR0037

Secchi depth	0.4
Estimated?	N

# 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	X
SCI/Biorecon	X
Water sample	X
RQ-2017-10-16-42	

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

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

Waterbody: Little Alapsha @ US 129	Date: 10/17/17	County: Hamilton	Storet Number: GTH-HR003
Analyst: Woods/Burkett	Signature: John Woods		
Comments: 2 m ²			

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]