



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

February 2016

Data Qualified?
Yes / No

STORET Station Name: Owl Creek @ Hwy 357

Date: 4-5-2016
(mm/dd/yyyy)

STORET Station ID: G1TLHRO010

Latitude: 29.92320

(Decimal Degrees)

WBID: 3574 RQ: 2016-03-14-56 ORG ID: 21FLTLHR

Longitude: -83.27118

(Decimal Degrees)

Receiving Body of Water: St. Johns River

Field ID: G1TLHRO010

County: Taylor

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Chris Green				✓	✓	✓	✓	✓	☒ Sample Container	☐ Van Dorn	☐ Pole	
Colby Marshall									☐ 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 / Low / Normal / <u>High</u> / Flooded				Matrix: Fresh / Marine / DI								
Meter ID#				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	13:20	0.2	0.4	5.9	63	6.6		0.45	133	18.6		
CEN												
Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>LVS</u> <u>RPS</u> LVI Other												
Parameter Suite		Parameter Methods				Preservation		Acid Lot#	Expiration	pH Check		
Preserved Nutrients		☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP				☒ Ice ☒ H2SO4		5A-5259020	9/16	☒ <2		
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO2				☐ <2		
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice		Place Preservative Sticker(s) Here (If Available)				
Chlorophyll		☒ CHLSUITE-W				☒ Ice						
BOD		☒ BOD-UNIN				☒ Ice						
Physical/Aggregate (Kit A/C)		☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CI-IC / ☒ W-COLOR / ☒ W-SO4-IC / ☒ W-TDS				☒ Ice						
Physical/Aggregate (Kit B/D)		☐ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY				☒ Ice						
Macroinvertebrates		☒ MI-FW-QLDC				☒ Formalin						
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR				☐ Ice						
Periphyton		☐ ALGAE-ID				☐ Ice						
Pesticides		☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R				☐ Ice						
		☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH				☐ Other						

Notes: SCI- 13:45

Place Label Here
(If Available)

Signature: Chris Green

Date: 4-5-2016

Field Parameters Entered into LIMS: CM 6/13/16
(Initials/Date)

Field Parameters QC in LIMS: CM 6-16-16
(Initials/Date)

Date Migrated to STORET: CM 7/1/16
(Initials/Date)

Field Sheets Scanned/Saved: CM 7-21-16
(Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Ond Creek @ Hwy 357 County: Lafayette Date: 4/5/16 Investigators: Green / Marche?

STORET Station Number: GTLHR 0010

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			93		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5			93		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			94		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			96		5			95	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			94		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5			93		5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth 0.4
Estimated?

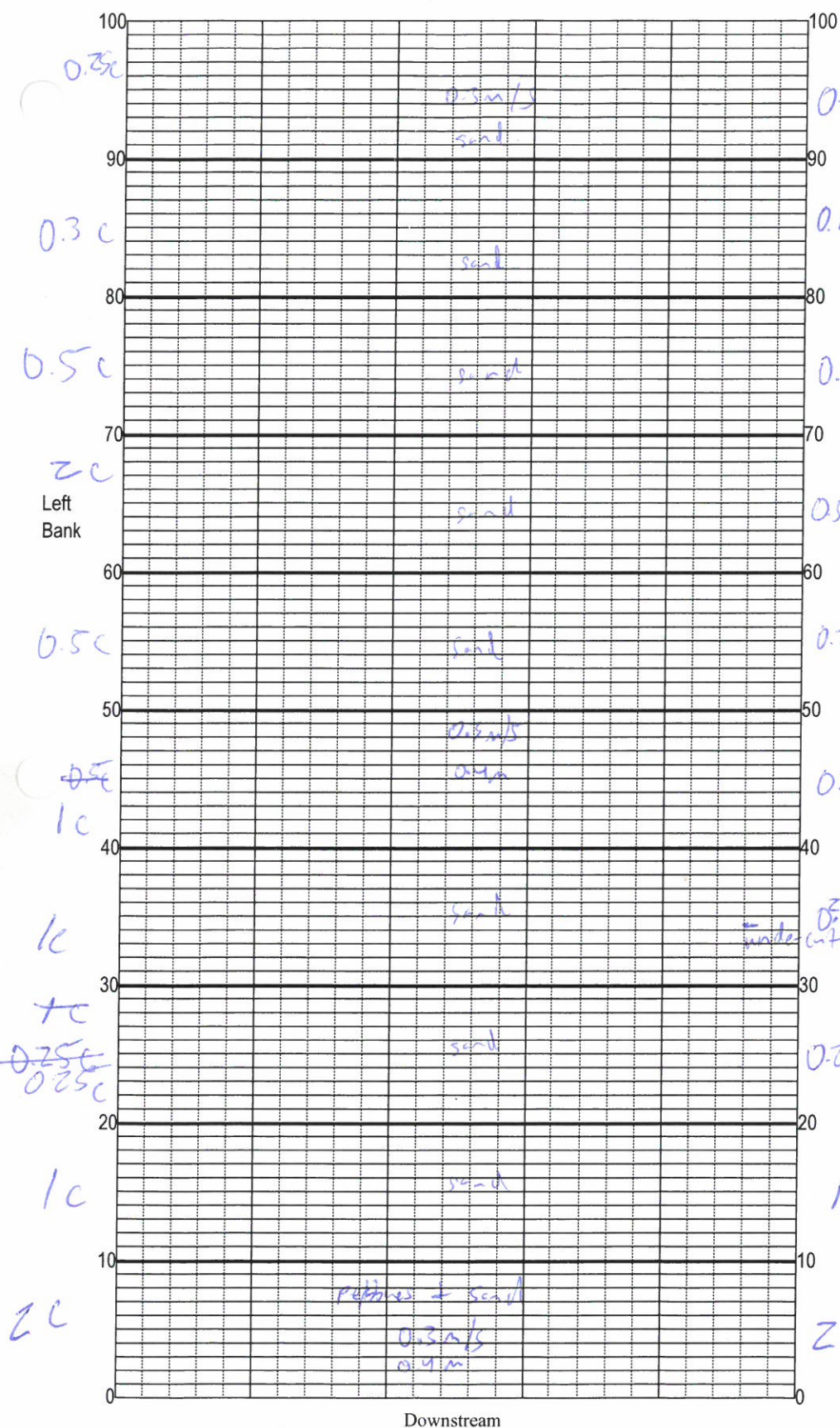
points ranked 4-6 11/2
total points assessed
% points ranked 4-6

Check accompanying data collected at same site/date.
Algal mat sample
Linear Veg Survey
Habitat Assessment
SCI/Biorecon
Water sample
RQ-2016-03-14-56

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

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 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Owl Creek @ Hwy 357

Date: 4/5/16

Sampler: Marshall/Green

100 m: Latitude _____	Longitude _____
0 m: Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance. %	
<u>A</u>	Snags <u>1.5</u>
<u>B</u>	Roots/undercut banks _____
<u>C</u>	Leaf Packs (or mats) <u>2.2</u>
<u>D</u>	Aquatic Macrophytes _____
<u>E</u>	_____
<u> </u>	_____
<u> </u>	total # observed = <u>3</u> # range expected = <u>1-2</u>
Average width <u>4</u> m	
Average depth <u>0.4</u> m	
Velocity measured at <u>90</u> meter mark.	
WQ & chemistry taken at <u>0</u> meter mark.	
Habitat Smothering: Note areas (on map) where sand or silt is smothering substrates, limiting habitability.	
Bank Stability: <u>+++</u> Note areas (on map) with unstable, eroding banks.	
Riparian Buffer Width: <u>718</u> Note areas (on map) where natural vegetation is altered or eliminated. <u>>18</u>	

Plants observed / other notes:
SA some habitat may have
been scoured recently
Cinzenna



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

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

SAMPLE ID _____ ORG ID 21FLTLHR0009 LATITUDE 29.92320
 COUNTY Lafayette STORET # 21FLTLHR0009 LONGITUDE -83.27118
 DATE 4/5/16 TIME 1345 SAMPLING AGENCY 8034
 TE NAME Out Creek @ Hwy 357
 FIELD ID/NAME GITLHR 0010 RECEIVING BODY OF WATER Stain Hatchee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>20</u> Silviculture <u>50</u> Field/Pasture <u>30</u> Agricultural <u>1</u> Residential <u>1</u> Commercial <u>1</u> Industry <u>1</u> Other (Specify) <u>1</u>								Landscape Development Intensity Index (LDI) <u> </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>4</u> m wide <u>0.3</u> m/s <u>0.25</u> m/s <u>0.3</u> m/s <u>0.3</u> m deep <u>0.4</u> m deep <u>0.3</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101) <u> </u>					
High Water Mark: <u>1.5</u> + <u>0.4</u> = <u>1.9</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): <u> </u>			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			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u>0.4</u> Mid: <u>0.2</u> <u>18.6</u> <u>6.6</u> <u>5.9</u> <u>63</u> <u>133</u> <u> </u> <u> </u> Bottom: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Meter ID: <u>600 XLM #12</u>					
Woody Debris (Snags) <u>1.5</u> <u>7</u> <u> </u> Undercut Banks / Roots <u> </u> <u> </u> <u> </u> Leaf Packs or Mat <u>2.2</u> <u>7</u> <u> </u> Aquatic Vegetation <u> </u> <u> </u> <u> </u> Rock or Shell Rubble <u> </u> <u> </u> <u> </u> Sand <u>96.3</u> <u>6</u> <u> </u> Mud / Muck / Silt <u> </u> <u> </u> <u> </u> Other <u> </u> <u> </u> <u> </u> Other <u> </u> <u> </u> <u> </u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: <u> </u> Exp: <u> </u>			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) <u> </u> AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐		
SAMPLING TEAM <u>Green / Marshall</u>			SIGNATURE: <u> </u>			DATE: <u>4/5/16</u>		

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

Waterbody: Old Creek @ Hwy 357	Date: 4/5/16	County: Lafayette	Storet Number: G/T4+R0d0
--------------------------------	--------------	-------------------	--------------------------

Analyst: <u>Green / Marital</u>	Signature: <u>[Signature]</u>
---------------------------------	-------------------------------

Comments: $LVS \in Z_m^2$

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]

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

SAMPLING AGENCY: 8034		STORET STATION NUMBER: GITLHR0010	DATE (MM/DD/YY): 4/5/16	RECEIVING BODY OF WATER: Stein Hatch River
REMARKS:	COUNTY: Lafayette	LOCATION: Owl Creek @ Hwy 357	FIELD ID/NAME: GITLHR0010	

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 10	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 4	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 18	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 19 ----- Primary Score 51	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 19	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 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 root zone with raw, eroded areas.
Right Bank 10 Left Bank 9	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 10 Left Bank 9	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 10 Left Bank 10 ----- Secondary Score 77	10 9	8 7 6	5 4	3 2 1

128

TOTAL SCORE

Date: 4/5/16	Analyst: Green/Mayell	Signature: [Signature]
--------------	-----------------------	------------------------