



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF

Data Qualified?

Yes / No

June 2016

STORET Station Name:

Boggy Creek

Date:

10/18/16
(mm/dd/yyyy)

STORET Station ID:

6ITLHR0005

WBID:

3603

Latitude:

County:

Taylor

RQ:

2016-10-17-70

ORG ID:

8034

Longitude:

Receiving Body of Water:

Steinhatchee R.

Field ID:

6ITLHR0005

Sampling Team Members

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

X
X
X
X
X

Sampling Equipment

☒ 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 / Low / Normal / High / Flooded

Matrix: Fresh Marine / DI

Meter ID# YSI 600 XIM#1 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	13:10	0.3	0.6	5.8	67	7.2	0.11	0.65	234	22.7
CEN										

Biological Samples Collected: None HA SCI LVS RPS 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	SP-6209120	07/17	☒ <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-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			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Place Preservative Sticker(s) Here
(If Available)

Notes:

Place Label Here
(If Available)

Signature:

[Signature]

Date:

10/18/16

Field Parameters Entered into LIMS:

[Signature] 10/18/16
(Initials/Date)

Field Parameters QC in LIMS:

[Signature] 10/18/16
(Initials/Date)

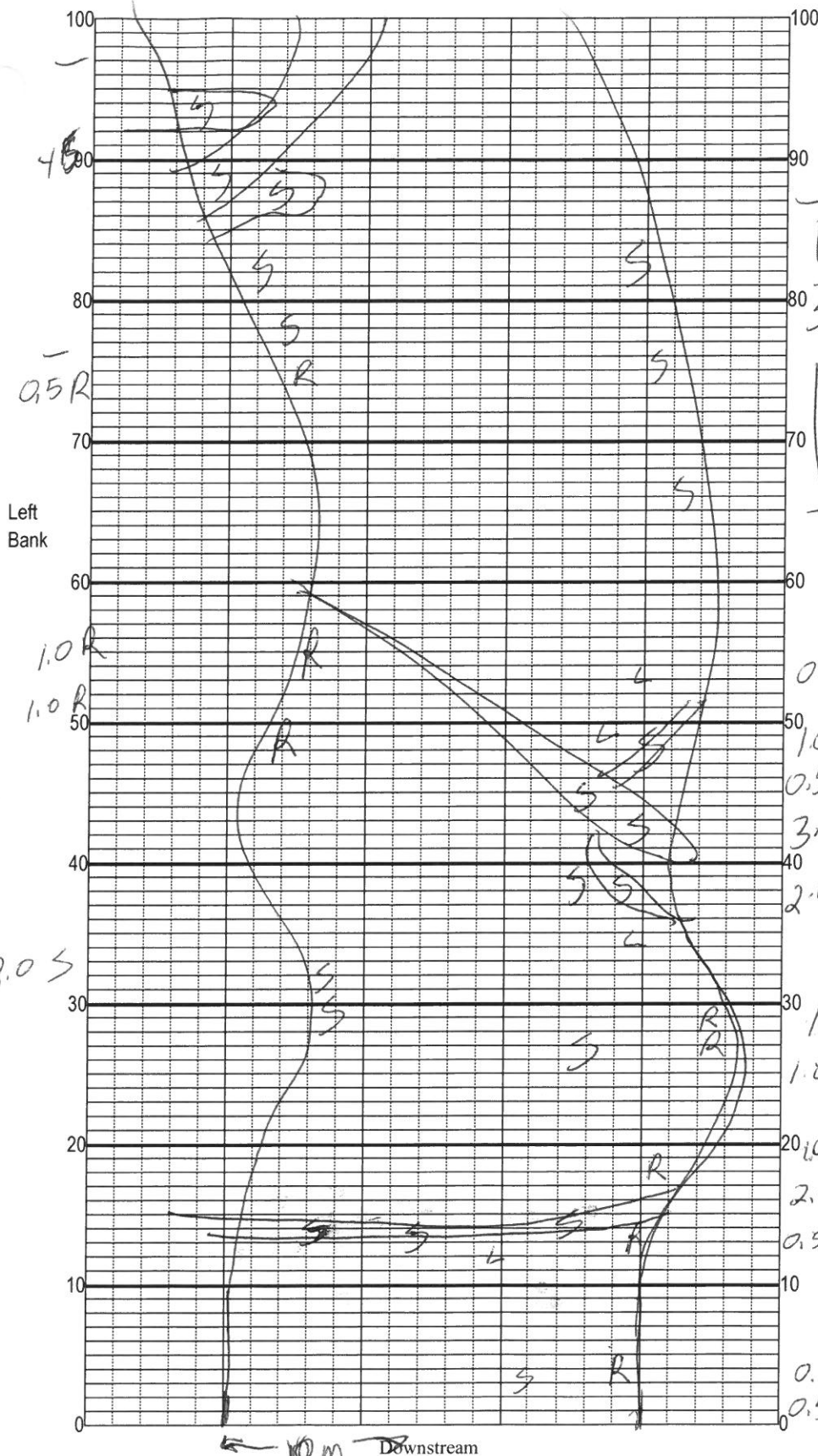
Date Migrated to STORET:

[Signature] 3/27/17
(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: GILCHROOOS

Date: 10/14/16

Sampler: Woods

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

S Snags 0.019

R Roots/undercut banks 0.005

L Leaf Packs (or mats) _____

A Aquatic Macrophytes _____

R Rock _____

P Pools _____

total # observed = 2
range expected = _____

Average width 9 m
Average depth 0.6 m

Velocity measured at 50 meter mark.

WQ & chemistry taken at 50 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:

0.2 m/s

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

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>GITLHR0005</u>					County: <u>Taylor</u>		Date: <u>10/14/16</u>		Investigators: <u>Eckles / Woods</u>	
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: <u>GITLHR0005</u>
0	1	X		462	60	1	N		41	Secchi depth <u>2.6</u> Estimated? <u>N</u>
	2	X								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								
10	1	N		76	70	1	N		22	# points ranked 4-6 total points assessed % points ranked 4-6
	2	N								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								
20	1	N		56	80	1	N		65	Check accompanying data collected at same site/date. Algal mat sample Linear Veg Survey Habitat Assessment SCI/Biorecon Water sample RQ-
	2	N								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								
30	1	N		46	90	1	N		72	
	2	N								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								
40	1	N		32	100	1	N		64	
	2	N								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								
50	1	N		72		1	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%.
	2	N								
	3	X								
	4	X								
	5	X								
	6	X								
	7	X								
	8	N								
	9	N								

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

SAMPLE ID 803 ORG ID _____ LATITUDE _____
 COUNTY Taylor STORET # G2TLHRO005 LONGITUDE _____
 DATE 10/18/14 TIME 13:35 SAMPLING AGENCY 8034
 SITE NAME Bossy Creek
 FIELD ID/NAME G2TLHRO005 RECEIVING BODY OF WATER Steinhatchee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>80</u> Silviculture <u>10</u> Field/Pasture <u>5</u> Agricultural <u>5</u> Residential <u>5</u> Commercial <u>5</u> Industry <u>5</u> Other (Specify) <u>5</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>9</u> m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>218</u> Right Bank: <u>218</u>				Hydrologic Modification Score (per FT 3101) <u> </u>			<u>0.2</u> m/s <u>6.2</u> m/s <u>0.2</u> m/s
High Water Mark: <u>1.1</u> + <u>0.6</u> = <u>1.7</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☒ No			<u>0.6</u> m deep <u>0.6</u> m deep <u>0.4</u> 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 INVERT PERI % # Times # Times Coverage Sampled Sampled Woody Debris (Snags) <u>0.019</u> <u>7</u> <u> </u> Undercut Banks / Roots <u>0.005</u> <u>7</u> <u> </u> Leaf Packs or Mat <u> </u> <u> </u> <u> </u> Aquatic Vegetation <u> </u> <u> </u> <u> </u> Rock or Shell Rubble <u> </u> <u> </u> <u> </u> Sand <u>99.97</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 QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u>0.6</u> Mid: <u>0.3</u> <u>22.7</u> <u>7.2</u> <u>5.8</u> <u>67</u> <u>234</u> <u>0.11</u> ☒ VOB Bottom: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Meter ID: <u>YSI 600 XLM # 9</u> <u>0.6</u>					
Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐		
Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SH 6009120</u> Exp: <u>02/17</u>			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: <u> </u> Exp: <u> </u>			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: ☒ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM Team Awesome (Woods/Fickles) SIGNATURE: DATE: 10/18/14

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

SAMPLING AGENCY: <u>80341</u>		STORET STATION NUMBER: <u>62TLHR0005</u>	DATE (MM/DD/YY): <u>10/18/16</u>	RECEIVING BODY OF WATER: <u>Steinhatchee River</u>
REMARKS:	COUNTY: <u>Taylor</u>	LOCATION: <u>Boggy Creek</u>	FIELD ID/NAME: <u>62TLHR0005</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>9</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>1</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>14</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 <u>14</u> 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>14</u> ----- Primary Score <u>38</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	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 <u>10</u> Left Bank <u>10</u>	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 <u>10</u> Left Bank <u>10</u>	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 <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>80</u>	10 9	8 7 6	5 4	3 2 1

118

TOTAL SCORE

Date: <u>10/18/16</u>	Analyst: <u>M. D. Eikle</u>	Signature: _____
-----------------------	-----------------------------	------------------

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

Waterbody: <u>Boggs Creek</u>	Date: <u>10/18/16</u>	County: <u>Taylor</u>	Storet Number:
Analyst: <u>M.A. Finkle</u>	Signature: <u>[Signature]</u>		
Comments: <u>2. m² of veg</u>			

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.

Species for additional taxa names.	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			HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90		90-100	HERBACEOUS SPECIES											
Alternanthera philoxeroides													Micranthemum glomeratum													Micranthemum umbrosum										
Bacopa caroliniana																																				
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																							
Elodea verticillata													Sagittaria kurziana																							
Elodea canadensis													Sagittaria lancifolia																							
Hydrocotyle													Sagittaria latifolia																							
Hydrophyllum polysperma													Salvinia minima																							
Hymenocallis													Samolus parviflora																							