



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

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Data Qualified?

Yes / No

STORET Station Name: St Rocky Creek Date: 10/18/16

STORET Station ID: G1TLHR0004 WBID: 3577 Latitude: _____

County: RQ - 2016-10-17-70 ORG ID: 8034 Longitude: _____

Receiving Body of Water: Steinhatchee Field ID: G1TLHR0004

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
M. A. Eckles		X	X				☒ Sample Container	☐ Van Dorn	☐ Pole		
J. M. Woods			X	X	X		☐ 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: <u>Fresh</u> / Marine / DI				
Meter ID# <u>YSI 600XIM #12</u> Photos: Yes / No							Tide Falling: Yes / No / <u>NA</u>				
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	12:00	0.30.2	0.4	4.8	54	7.1	6.13	0.3	251	21.7	
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				☐ <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					
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				☐ Ice					
		☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH				☐ Other					

Notes: _____

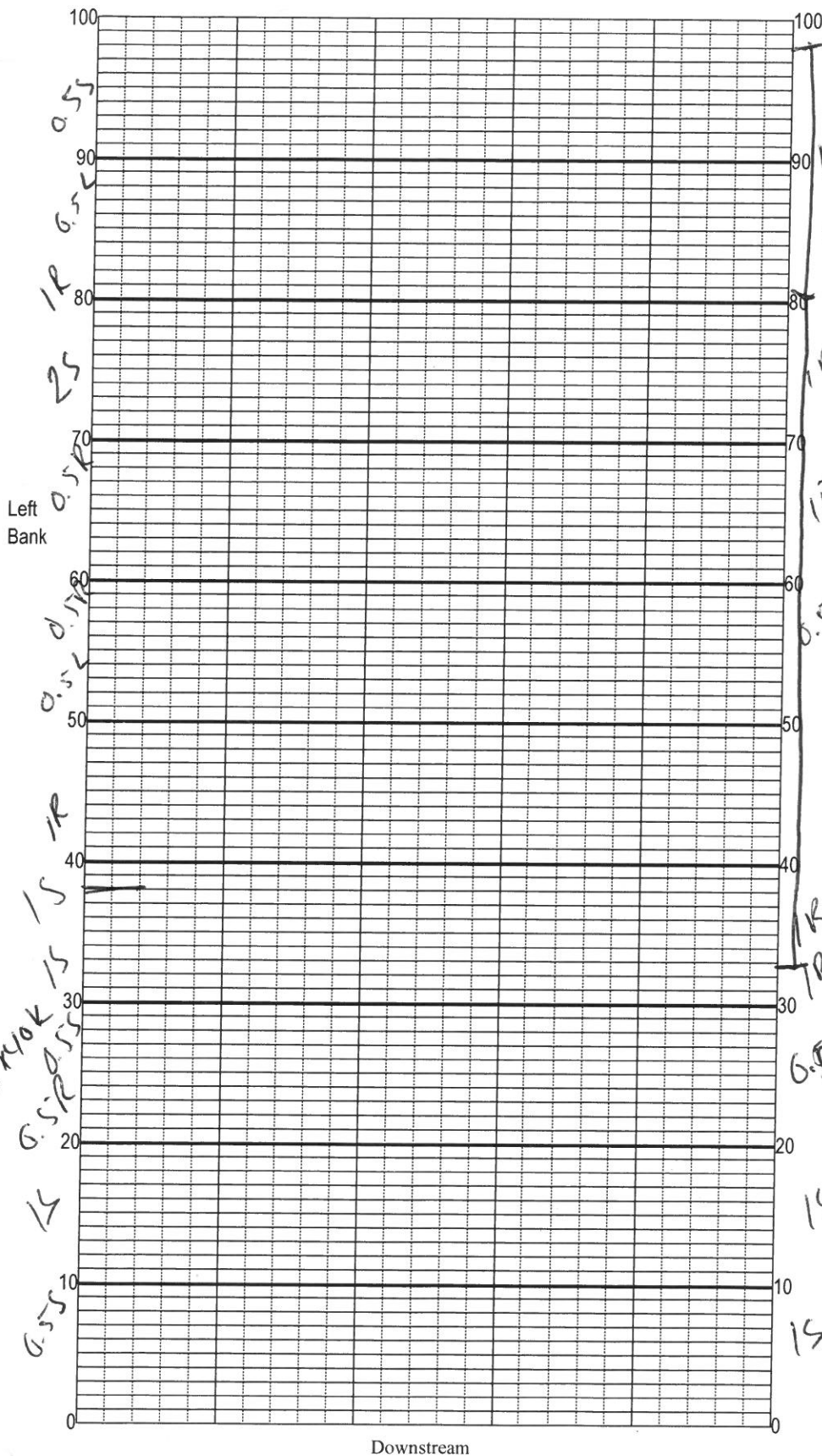
Place Label Here
(If Available)

Signature: [Signature] Date: 10/18/16

Field Parameters Entered into LIMS: [Signature] (Initials/Date) Field Parameters QC in LIMS: [Signature] (Initials/Date)

Date Migrated to STORET: [Signature] (Initials/Date) Field Sheets Scanned/Saved: [Signature] (Initials/Date)

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



Location: Rocky Creek
 Date: 10/18/10
 Sampler: M.A. Eckler

100 m: Latitude _____
 Longitude _____
 0 m: Latitude _____
 Longitude _____

Substrates: Code key, draw proportionate habitat abundance.		%
☐ S	Snags	<u>1.5</u>
☐ R	Roots/undercut banks	<u>2.2</u>
☐ L	Leaf Packs (or mats)	<u>0.3</u>
☐ A	Aquatic Macrophytes	_____
☐ K	Rock	<u>11</u>
☐		
☐	Pools	total # observed = <u>3</u> # range expected = <u>2-4</u>

Average width 5 m
 Average depth 0.5 m

Velocity measured at 90 meter mark. 9.5

WQ & chemistry taken at 100 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:

7.5 S = 1.5
1.5 L = 0.3
11 R = 2.2
55 K = 11

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

ite: 62THR0004 / Rocky Creek

County:

Date: 10/18/10

Investigators: M.A. Eckles / J.M. Woods

STORET Station Number:

62TLHR0004

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			61		5			40	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			55		5			40	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			33		5			12	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			27		5			8	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			41		5			4	
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1	N			
	2					2				
	3					3				
	4					4				
	5			35		5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth 6.3
Estimated?

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

Check accompanying data collected at same site/date.

Algal mat sample N
Linear Veg Survey N
Habitat Assessment N
SCI/Biorecon N
Water sample N

RQ- 10-17-
2016-10-17-70

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 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 8034 LATITUDE _____
 COUNTY _____ STORET # G2TLHR0004 LONGITUDE _____
 DATE 8/18/16 TIME 12:30 SAMPLING AGENCY 8034
 SITE NAME Rocky Creek
 FIELD ID/NAME G2TLHR0004 RECEIVING BODY OF WATER Steinhatchee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ 80 Silviculture ☒ 10 Field/Pasture ☐ Agricultural ☒ 5 Residential ☒ 5 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 _____ m wide _____ m/s _____ m/s _____ m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>514</u> Right Bank: <u>518</u> Hydrologic Modification Score (per FT 3101) ☐				_____ m/s _____ m/s _____ m/s			
High Water Mark: <u>1.2</u> + <u>0.4</u> = <u>1.6</u> (m) (above present water level) (present depth) (above bed) Artificially Impounded ☐ Yes ☒ No				_____ m deep _____ m deep _____ 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 ☐
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SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☒ RPS ☐ LVS

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	<u>1.5</u>	<u>5</u>	
Undercut Banks / Roots	<u>2.2</u>	<u>5</u>	
Leaf Packs or Mat	<u>0.3</u>	<u>2</u>	
Aquatic Vegetation			
Rock or Shell Rubble..	<u>11</u>	<u>5</u>	
Sand.....	<u>85</u>	<u>1</u>	
Mud / Muck / Silt		<u>2</u>	
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>0.3</u>
Mid:	<u>0.2</u>	<u>21.4</u>	<u>7.1</u>	<u>54.8</u>	<u>54</u>	<u>281</u>	<u>0.31</u>
Bottom:							

Meter ID: YSI 600 x 1 m # 9 TOTAL DEPTH 0.4

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: SH-6209120 Exp: 07/17
 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:

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

SAMPLING TEAM

Team Awesom (Woods/Eckles) SIGNATURE: _____ DATE: 70/18/16

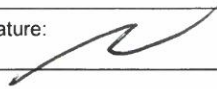
DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: 8034		STORET STATION NUMBER: 61TLHR0004	DATE (MM/DD/YY): 10/18/16	RECEIVING BODY OF WATER: Steinhatchee River
REMARKS:	COUNTY:	LOCATION: Rocky Creek	FIELD ID/NAME: 61TLHR0004	

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>15</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>10</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 <u>10</u> 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>10</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>10</u> ----- S.T. Primary Score <u>41</u> <u>51</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

S.T. 41 131

TOTAL SCORE

Date: <u>10/18/16</u>	Analyst: <u>M.A. Eckles</u>	Signature: 
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DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Rock Creek

County: _____

Storet Number:

Analyst: M. A. Eickes

Signature: _____

Comments: ~~less~~ less than $2m^2$ of veg

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]