

LAB # 00255



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

 Data Qualified?
Yes / No

January 2016

STORET Station Name: Rhoda @ 192

Date: 4/19/16
(mm/dd/yyyy)

STORET Station ID: 21030146

Latitude: _____
(Decimal Degrees)

WBID: RQ-2016-04-11-12 ORG ID: 21FLA

Longitude: _____
(Decimal Degrees)

Receiving Body of Water: Sunshine lake

Field ID: _____ County: _____

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection	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 / <u>Low</u> / Normal / High / Flooded								Matrix: <u>Fresh</u> / Marine / DI		
Meter ID# _____				Photos: <u>Yes</u> / <u>No</u>				Tide Falling: Yes / <u>No</u> / NA		

Time Zone	Time	Total Depth (m)	Sample Depth	Temp (°C)	DO (mg/L)	DO (%SAT)	COND (µmhos/cm)	Salinity (ppt)	pH	Secchi Disk (m)
EST	1040	0.1	0.1	16.1	7.5	76.6	86	0.04	6.8 7.23	VOB
CEN										0.15

Biological Samples Collected:		None	HA	<u>SCI</u>	LVS	RPS	LVI	Other _____	
Parameter Suite	Parameter Methods				Preservation	Acid Lot#	Expiration	pH Check	
Preserved Nutrients	☒ TKN / TP / Nox / NH3 / TOC ☐ Other _____				☒ Ice ☒ H ₂ SO ₄			☒ < 2	
Metals	☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO ₃			☐ < 2	
Filtered Nutrients	☒ op ☐ Field Filtered 0.45 µm Filter				☒ Ice				
Chlorophyll	☒ CHLSUITE-W				☒ Ice				
BOD	☐ BOD-INHB ☐ BOD-UNIN				☐ Ice				
Physical/Aggregate	☒ TSS / Turbidity / Alkalinity / Color ☐ Other _____				☒ 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 _____				

 Contains
1:1
Sulfuric Acid
SA-5259020
EXP: 09/16/16
Warning!
See MSDS

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

SAMPLING AGENCY: DEAR NED Roe		STORET STATION NUMBER: 21030146	DATE (MM/DD/YY): 4/14/16	RECEIVING BODY OF WATER: SUNSHINE LAKE
REMARKS: WBID 3648	COUNTY: Alachua	LOCATION: Rhoda @ 192		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 12	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 6	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 10	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 12 Primary Score 40	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 15	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 5 Left Bank 5	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 9 Left Bank 10	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 9 Left Bank 10 Secondary Score 63	10 9	8 7 6	5 4	3 2 1

103 TOTAL SCORE

Date: 4/14/16	Analyst: <i>J. P. ...</i>	Signature:
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Rhoda Br @ 192 Ave County: Alachua Date: 04/19/16 Investigators: PARRISH, O'Connor

STORET Station Number:

21030146

WBID 3648

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		96	60	1	N		96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1	N		96	70	1	N		96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1	N		96	80	1	N		92
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1	N		96	90	1	N		96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1	N		96	100	1	N		96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1	N		96		1	N		
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			

Secchi depth 0.25
Estimated?

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
SCI/Biorecon
Water sample
RQ-

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

NO AQUATIC PLANTS
< 2 m² = 0

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 _____ LATITUDE 29.82965
COUNTY Alachua STORET # 21030146 LONGITUDE 82.33
DATE 04-19-16 TIME 1040 SAMPLING AGENCY DEAR MED ROC
SITE NAME Rhoda Br @ 192
FIELD ID/NAME _____ RECEIVING BODY OF WATER SUNSHINE LAKE

RIPARIAN ZONE / STREAM FEATURES

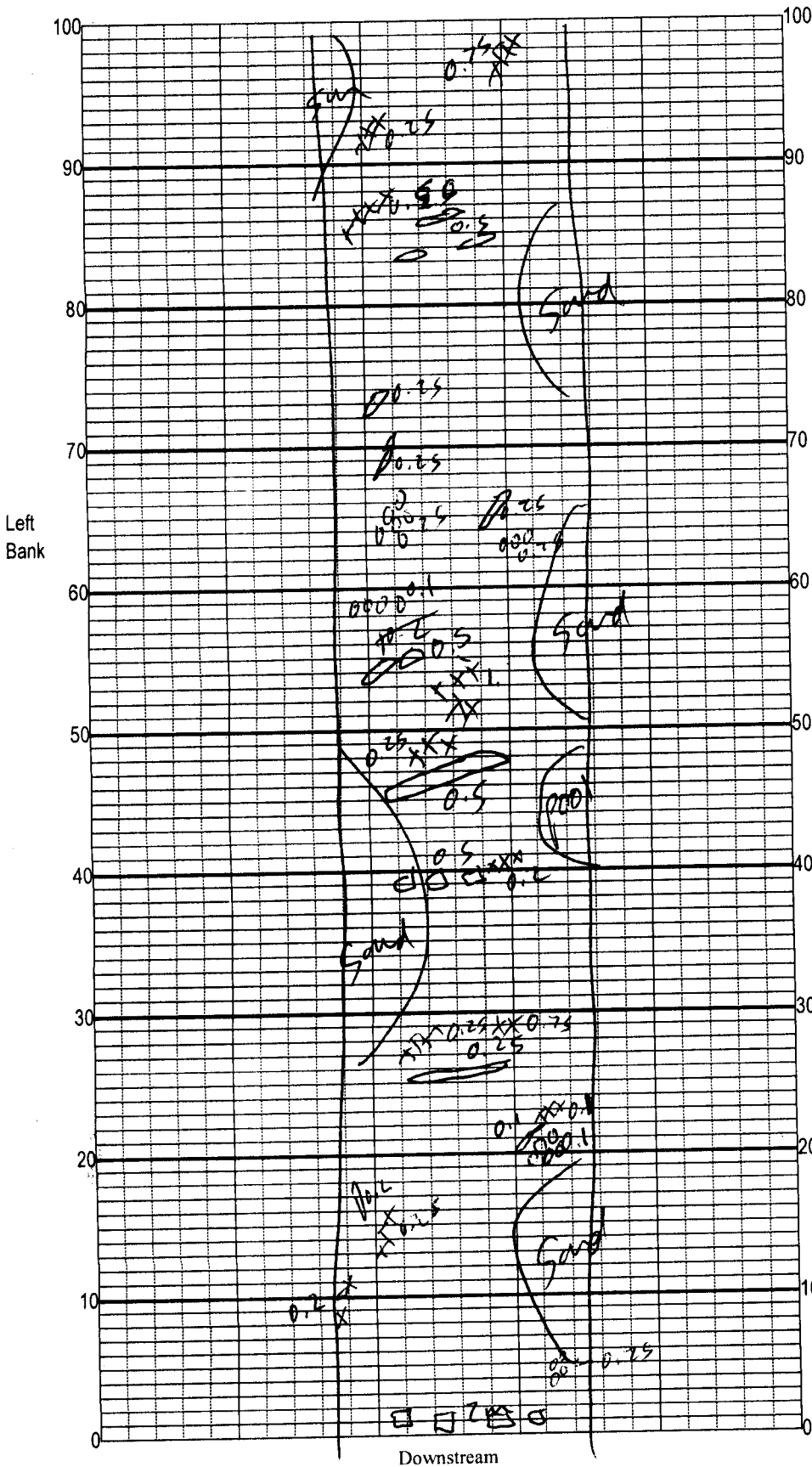
Meter ID: QUANTA STA # DEP# 143754

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>60</u> Silviculture _____ Field/Pasture _____ Agricultural <u>10</u> Residential <u>30</u> 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 <u>2</u> m wide _____ m/s <u>0.1</u> m/s _____ m/s _____ m deep <u>0.2</u> m deep _____ m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) _____			
High Water Mark: <u>1.0</u> + <u>0.2</u> = <u>1.2</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): _____		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 % Coverage # Times Sampled # Times Sampled Woody Debris (Snags) <u>2</u> _____ Undercut Banks / Roots <u>3</u> _____ Leaf Packs or Mat <u>1.5</u> _____ Aquatic Vegetation _____ Rock or Shell Rubble <u>2</u> _____ Sand <u>90+</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: _____ Mid: <u>0.1</u> <u>16.1</u> <u>6.8</u> <u>7.5</u> <u>76.6</u> _____ Bottom: _____ System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) _____ Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) _____ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>SA 5259020</u> Exp: <u>9-16-16</u> Algae Sample Taken? ☐ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☒ ☐ ☐ ☐ Iron/Sulfur Bacteria: ☐ ☒ ☐ ☐		AMBIENT FIELD CONDITIONS / NOTES: <u>RQ-2016-04-11-12</u> <u>WBD 3448</u> <u>NO AQUATIC PLANTS (ONZ)</u> Hydrologic Disturbance Scoring ☐ 1-2 ☒ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☒ The antecedent hydrologic conditions have been met to my best knowledge.			
SAMPLING TEAM <u>Ramish O'Connor</u>		SIGNATURE: <u>Vicki O'Connor</u>			

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



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

Location: Rhuda 192
Date: 4/19/16
Sampler: JP/PO

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____
Substrates: Code key, draw proportionate habitat abundance.	
	Snags <u>2</u> %
	Roots/undercut banks <u>3</u> %
	Leaf Packs (or mats) <u>1.5</u> %
	Aquatic Macrophytes _____ %
	Pools _____ %
total # observed = _____	
# range expected = _____	
Average width _____ m	
Average depth _____ m	
Velocity measured at _____ meter mark.	
WQ & chemistry taken at _____ 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:

XX = 1.25 + 1 + 1

□ = 0.25

OO = 0.25 x 2 m =

1.5 wide

150 total

NO Aquatic PLANTS