



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE ____ OF ____

Data Qualified?
Yes / No

STORET Station Name: Colloway 400m below JS441

Date: 05/19/2016
(mm/dd/yyyy)

STORET Station ID: 61NE0021

Latitude: 29.74697
(Decimal Degrees)

WBID: 3678A RQ-2016-05-16-26

ORG ID: 21 FLA

Longitude: 82.43016
(Decimal Degrees)

Receiving Body of Water: Sanfelas Lake

Field ID: _____

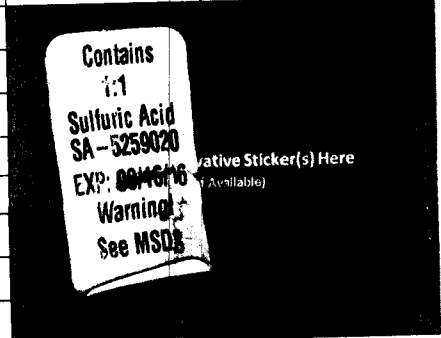
County: ALACHUA

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J Parrish					X	X		
P O'Connor				X	X	X	X	X

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Equipment ID _____		
Collection Method		
☒ Wading From	Via Boat	
☐ Shore	☐ Canoe/Kayak	
☐ Other (note below)	☐ Electric Motor	
	☐ Gasoline Motor	

Water Level: Dry / Low / <u>Normal</u> / High / Flooded				Matrix: <u>Fresh</u> / Marine / DI						
Meter ID# _____				Tide Falling: Yes / No / <u>NA</u>						
Time	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	1100	0.1	0.2	7.6	88.	7.70	0.17	NOB	351	22.3
CEN								0.25		

Biological Samples Collected: None HA <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	5259020	9/16/16	☒ <2
Metals				☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO2			☐ <2
Filtered Nutrients				☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			
Chlorophyll				☒ CHLSUITE-W				☒ Ice			
BOD				☐ BOD-UNIN				☐ Ice			
Physical/Aggregate (Kit A)				☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			
Physical/Aggregate (Kit B)				☐ 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: _____

Place Label Here (If Available)

Signature: Parrish O'Connor Date: 05/19/16

Field Parameters Entered into LIMS: DP 5/23/16 (Initials/Date)

Field Parameters QC in LIMS: _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date)

Field Sheets Scanned/Saved: _____ (Initials/Date)

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

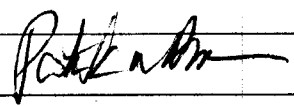
76125

SAMPLING AGENCY: DEAN NED ROC		STORET STATION NUMBER: GINE0021	DATE (MM/DD/YYYY): 05/19/14	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Alachua	LOCATION: cellar cr 400m DS 441	FIELD ID/NAME:	

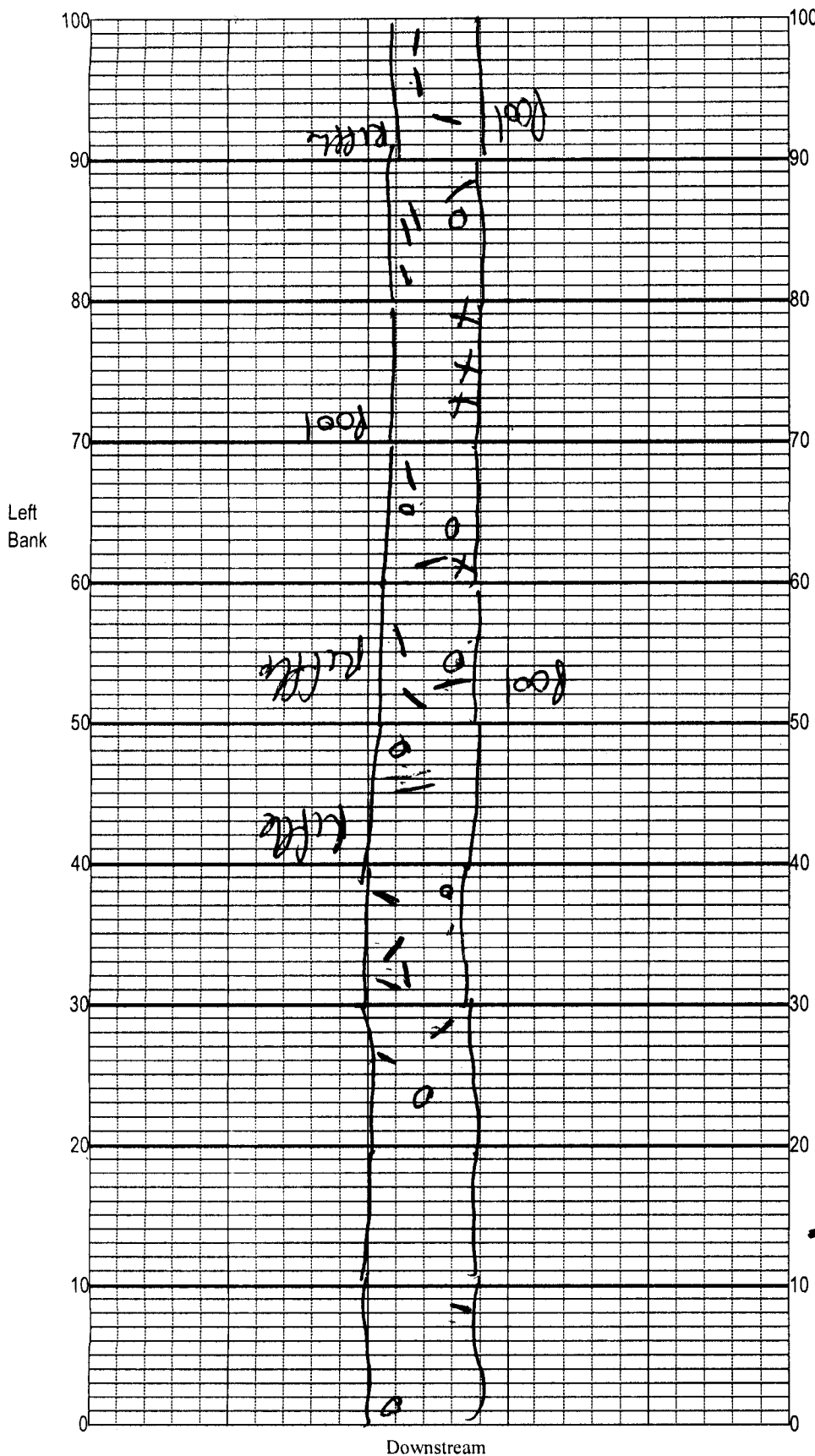
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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 8	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 12 Primary Score 50	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 20	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank 5 Left Bank 5	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 10 Left Bank 10	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 10 Left Bank 10 Secondary Score 70	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

120

TOTAL SCORE

Date: 05/19/14	Analyst: PO'Connor	Signature: 
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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: Cullon Creek
400 m below US44
Date: 05/19/16
Sampler: P. O'Connor

100 m: Latitude _____	Longitude _____
0 m: Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance. %	
☒ Snags	1
☒ Roots/undercut banks	1
☒ Leaf Packs (or mats)	2
☐ 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:

< 2m observed while
doing LVS? 2% leaf
No Aquatic Plants

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

SAMPLE ID _____ ORG ID 21 FLA LATITUDE 29.76697
 COUNTY Alachua STORET # 61NE0021 LONGITUDE 82.43010
 DATE 05/19/16 TIME 1100 SAMPLING AGENCY NE ROC
 SITE NAME Celton Cr 400m below 441
 FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: _____

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):

Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ 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

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: >18 Right Bank: >18

Hydrologic Modification Score (per FT 3101) 3-

High Water Mark: 0.4 + 0.1 = 0.5
 (m) (above present water level) (present depth) (above bed)

Artificially Impounded

☐ Yes ☐ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

3 m wide

0.3 m/s 0.1 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

% Coverage ☐ INVERT ☐ PERI
 # Times Sampled # Times Sampled

Woody Debris (Snags) 7 5 5

Undercut Banks / Roots 1 5 5

Leaf Packs or Mat 2 5 5

Aquatic Vegetation 2 5 5

Rock or Shell Rubble.. 2 5 5

Sand..... 90 5 5

Mud / Muck / Silt 2 5 5

Other 2 5 5

Other 2 5 5

WATER QUALITY

Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)
 Top: 0.1 22.3 7.7 7.6 88 351 0.17 0.25
 Mid: 0.1 22.3 7.7 7.6 88 351 0.17 0.25
 Bottom: 0.1 22.3 7.7 7.6 88 351 0.17 0.25

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

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: _____ Exp: _____

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: ☐ ☒ ☐ ☐

AMBIENT FIELD CONDITIONS / NOTES:

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

Garmin / Palmer

SIGNATURE:

Garmin

5/19/16

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Cellon 400m down from 441 County: Alachua Date: 5/19/16 Investigators: J. Parrish, P. Connor

Transect (m) Point 1=right Algal Thickness Rank (N-6, X) Estimated Canopy Cover

Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	N	92
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
10	1	N	N	96
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
20	1	N	N	92
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
30	1	N	N	96
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
40	1	N	N	96
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
50	1	N	N	96
	2	N	N	
	3	N	N	
	4	N	N	
	5	N	N	
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	

STORET Station Number:

Secchi depth
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-2016-05-16-26

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%.

[illegible]

[illegible]

A horizontal scale bar with tick marks. Above the bar, the distances 0, 0.05, 0.1, 0.15, and 0.2 are labeled. Below the bar, the distances 0, 0.075, 0.15, and 0.3 km are labeled. The text '1:4,514' is centered above the bar.

- 352
281
7444

Map created by Map Direct, powered by ESRI, cellon/hague
represents that its use would not infringe privately owned rights