



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

DO failed CCV

Meter

Passed End
of Day CCVYes ☐ No ☒

WIN Station Name:	MATTRESS DRAIN AT ROCKRIDGE RD				Sample Date:	6/26/2023	
WIN / Field ID:	G4CE0247	ORG ID:	21FLCEN	ENR:	-	Latitude:	28.28893
County:	POLK	WBID:	1435	STREAM		Longitude:	-81.94247
Receiving Body of Water:	Withlacoochee River				RQ-	2023-03-06-27	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katie March	x	x		x	x
Victoria Schwartz	x	x	x	x	x

Sampling Equipment				
x	Sample Container		Carboy	
	Dipper		Van Dorn	
x	Syringe		Pole	
	Syringe Lot#	2327923	Filter Lot#	17769663
	Secchi Equipment ID:	Knothead		
Collection Method				
x	Wading		Canoe/Kayak	
	From Shore		Electric Motor	
			Gasoline Motor	
	Depth Measured With	Secchi		

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	Craw Daddy
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1248	0.4	0.2	4.77	61.3	28.2	5.94	0.4	93.2	0.04
								VOB (s)		

Biological Samples Collected: HA LVS RPS

SBIO Visit ID: 87427 HA ID: RPS ID: 10129 Macrophyte ID: 12508 LIMS Sample ID In The Macrophyte Module: 2419802

Parameter Suite	Parameter Methods (LIMS Test Codes)	Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli	ICE			
Chlorophyll	CHLSUITE-W	ICE			
Physical/Aggregate	ALKALINITY, TURBIDITY, W-F, W-TSS	ICE			
Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS	ICE			
Filtered Nutrients	W-PO4-F	ICE			
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	ICE			
Metals	W-ICPMS	ICE			
Organics (LC)	W-E8321-DI	ICE			
Macroinvertebrates					
Organics (GC)	W-PSNP-TQ	Ice			
Molecular	PCR-HF183	Ice			
Periphyton					
Phytoplankton					
BOD					
DOC					
Other(s)					
Field Comments:	Sunny. Recent rain DO failed CCV				
Comments on COC:					
Relinquish Date:	06/26/2023	Signature:			

LIMS EVENT ID: CEN-DIST-2023-06-27-01

WIN Import ID: 42158

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 7/27/23

QC Station ID, Field Parameters In LIMS DMT: VLS 8/2/23

Save Field Sheets on Network: KWM 8/15/23 (Initials/Date)

Migrate Data to WIN: KWM 8/15/23 (Initials/Date)

(Initials/Date)

(Initials/Date)

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

SAMPLE ID _____ ORG ID _____ LATITUDE 28.28813
 COUNTY Polk STORET # 64CE0247 LONGITUDE -81.94247
 DATE 6/26/23 TIME 12:48 SAMPLING AGENCY 21FLCN
 SITE NAME Matress Drain at Rockridge Rd.
 FIELD ID/NAME 64CE0247 RECEIVING BODY OF WATER Withlacoochee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>60</u> Silviculture <u>0</u> Field/Pasture <u>40</u> Agricultural <u>0</u> Residential <u>0</u> Commercial <u>0</u> Industry <u>0</u> Other (Specify) <u>0</u>								Landscape Development Intensity Index (LDI) <u>0</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>21 sec = 0.0476</u> <u>3</u> m wide
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>1-2</u>				<u>0.048</u> m/s
High Water Mark: <u>1.0</u> + <u>0.4</u> = <u>1.4</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				<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			WATER QUALITY					
Woody Debris (Snags) <u>0</u> <u>0</u> <u>0</u> Undercut Banks / Roots <u>0</u> <u>0</u> <u>0</u> Leaf Packs or Mat <u>0</u> <u>0</u> <u>0</u> Aquatic Vegetation <u>0</u> <u>0</u> <u>0</u> Rock or Shell Rubble.. <u>0</u> <u>0</u> <u>0</u> Sand..... <u>0</u> <u>0</u> <u>0</u> Mud / Muck / Silt <u>0</u> <u>0</u> <u>0</u> Other <u>0</u> <u>0</u> <u>0</u> Other <u>0</u> <u>0</u> <u>0</u>			Depth (M) <u>0.2</u> Temp. (°C) <u>28.2</u> pH (SU) <u>5.94</u> D.O. (MG/L) <u>4.77</u> D.O. Sat (%) <u>61.3</u> Cond. (UMHO/CM) <u>93.2</u> Salinity (PPT) <u>0.04</u> SECCHI (M) <u>0.4</u>	Meter ID: <u>Craw Daddy</u>				
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☒ ☒ ☐ ☐ Aquatic Plants: ☐ ☐ ☐ ☒ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____					
			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐					
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			AMBIENT FIELD CONDITIONS / NOTES: <u>hot/sunny. recent rain. No Sci - LVS/RPS/HA completed.</u> <u>Site is dry most of the year. Recent large rain</u> <u>events raised water level</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM

Katie March / Victoria Schwarz

SIGNATURE

K March / V Schwarz

DATE:

6/26/23

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

SAMPLING AGENCY: <u>21FLCEN</u>	STORET STATION NUMBER: <u>G4CE0247</u>	DATE (MM/DD/YY): <u>6/26/23</u>	RECEIVING BODY OF WATER: <u>With lacoochee River</u>
REMARKS:	COUNTY: <u>Polk</u>	LOCATION: <u>matress drain</u>	FIELD ID/NAME: <u>G4CE0247</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>8</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>17</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>5</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>14</u> Primary Score <u>44</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 or straightening 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>18</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 woody 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 woody root zone with raw, eroded areas.
Right Bank <u>9</u> Left Bank <u>9</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>8</u> Left Bank <u>8</u> Secondary Score <u>72</u>	10 9	8 7 6	5 4	3 2 1

116 TOTAL SCORE

Date: <u>6/26/23</u>	Analyst: <u>Katie March / Victoria Schwach</u>	Signature: <u>Katie March / Victoria Schwach</u>
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US



≈ 3 m wide

Sampler: Victoria S/ Katie M

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance.	%
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☒ Aquatic Macrophytes 65

total # observed = 3

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:

Plants observed / other notes:

Sample site at edge of A Green Swamp, but upstream the creek is in pastures and has been cleared of almost all vegetation.

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Mattress Drain County: Polk Date: 6/26/23 Investigators: Victoria Schwartz / Katie Mark

STORET Station Number: WIN 64CE0247

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	2			60	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		72		5	2		76
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
10	1	2			70	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		68		5	2		85
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
20	1	2			80	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		75		5	2		71
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
30	1	2			90	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		89		5	2		88
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
40	1	2			100	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		50		5	2		89
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
50	1	2				1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		44		5	2		
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		

Secchi depth 0.4 m
Estimated? 0.3

points ranked 4-6 0
total points assessed 99
% points ranked 4-6 0%

Check accompanying data collected at same site/date.
Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☐
Water sample ☒
RQ- 2023-03-06-27

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

Site is dry most of the year.
Recent large rain events raised water level. No filamentous algae observed

Bridge

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]